

MOTOR AGE

Vol. V No. 20

MAY 19, 1904

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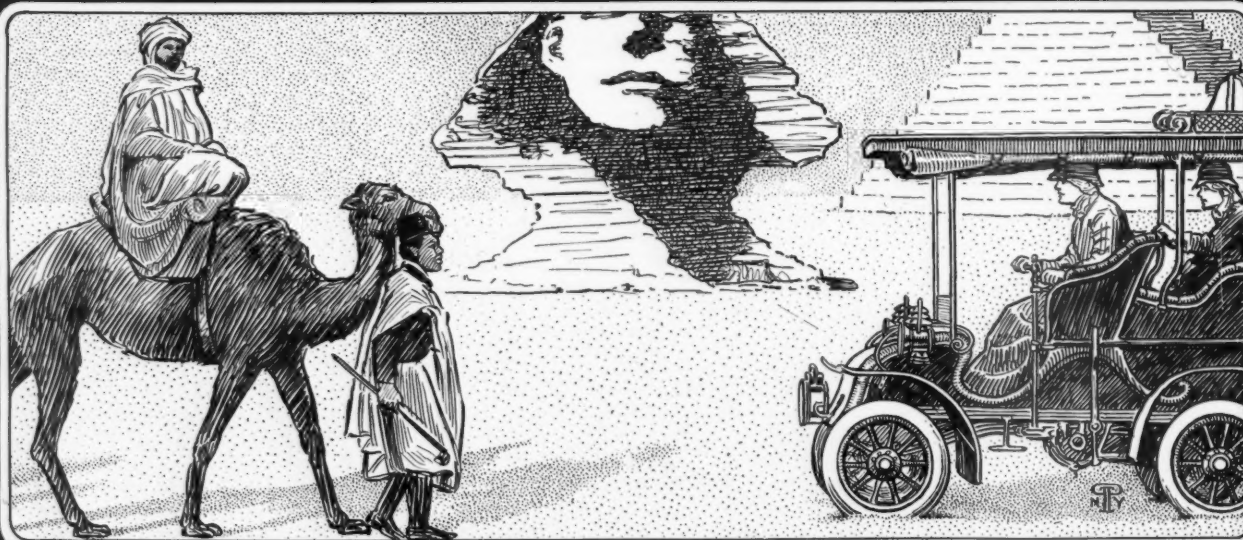
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MOTOR AGE

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\$2.00 Per Year

AMERICA WILL NOT BE IN IT

Empire City Track, Yonkers, N. Y., May 19—Special Telegram—America will not be represented in the James Gordon Bennett international cup race. The racing committee of the A. C. A. issued the following statement and decision as the result of the lamentable fizzle attending the second trials of the three candidates for international honors, Louis P. Mooers, Barney Oldfield and Walter Christie:

"In view of the fact that Mooers has withdrawn his car, Christie has failed to compete in the trial, and Winton has declined to abide by the regulations provided for the trial, it is decided that no car be recommended to represent America in the Gordon Bennett cup race this year.—Signed—RACING COMMITTEE, Automobile Club of America, by A. C. Bostwick, Chairman.

To-day there was but one starter, the Peerless, first of the 1904 racers completed by Louis P. Mooers. It was driven by Charles Wridgeway, and ordered stopped and called from the track by Mooers, after having covered 19¾ miles at an easy jog. Mooers, as the only candidate, did not care to send his car as a sole American competitor. Christie was reported on the way to the track, but failed to appear up to 3 o'clock, when the committee had, a half-hour before, rendered its decision. Oldfield was on hand early with Bullet II, but on refusal of Percy Owen to sign the contract drawn up for the indemnification of the club and track in event of damage by accident, did not ride. Owen objected to the following clause in the contract that had been drawn up:

"And the parties of the second part agree

and covenant to indemnify and save harmless the parties of the first part of and from any and all claims for injuries, damages and all claims whatever to person or property, or otherwise, which may be made by corporations or other parties arising of, or in connection with, the holding of said speed trials, or any acts, negligence, mismanagement or omissions in connection therewith, or defects in the condition of the aforesaid grounds or structures thereon."

Owen's contention was that the Winton company made itself liable for damages caused by other cars than its own. This was the view taken by the Winton counsel, and by Mr. Winton, who was consulted by telephone. Owen says that the orders were to refuse to sign the contract, and he simply obeyed orders. Bostwick, Scott and Moore, of the committee, were present, and said that Owen, whether or not he desired amendment to the contract, suggested none.

W. W. Niles, attorney for the club, who drew the contract, said that it simply sought to release the club and track from liability to damages, and left the question of liability among the competitors, an inconsequential matter for decision under common law.

The prevailing lay opinion among newspaper men and those who were allowed to read the contract was that it was drastic and unjust to the entrants, and seemed to make them jointly liable for damages caused by one another and by anyone else who used the track during the day.

The Peerless was sent away 5 minutes past 1 o'clock, Wridgeway driving, with a small boy beside him to conform to the two-passenger rule. He took an easy jog and made no attempt at fast time. The watch showed 6:41 1-5 for 5 miles; 13:28 for 10; 20:50 for 15 miles. At 19¾ miles, which he covered in 27:43 2-5, Mooers called Wridgeway from the track and formally withdrew from the race.

There were thirty automobiles on hand, and 200 spectators. B. M. Shanley, Jr., drove the Vanderbilt 60-horsepower Mercedes once around in 1:14 2-5.

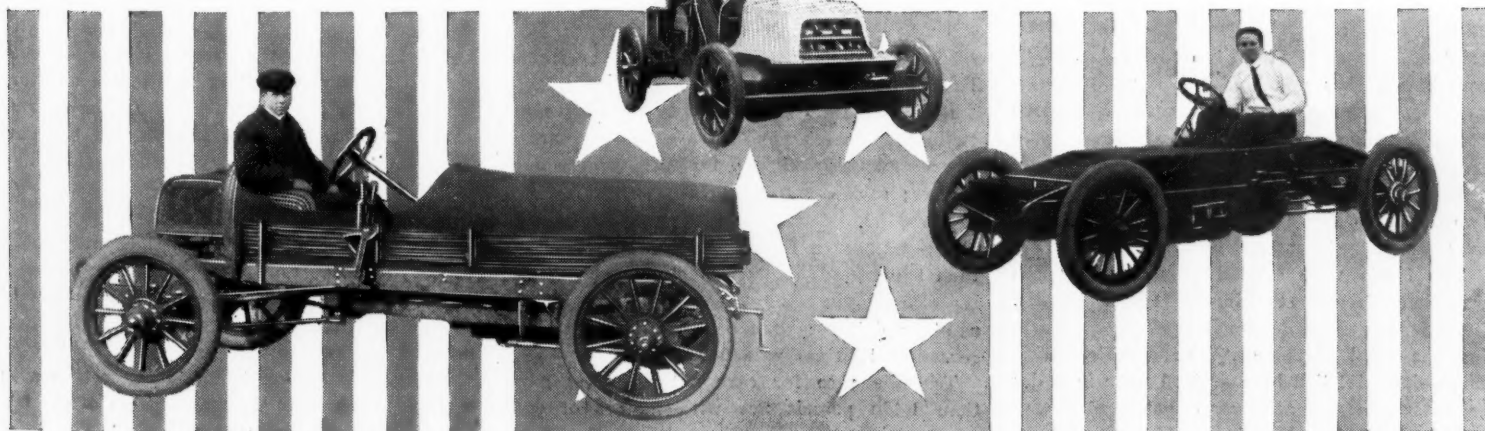
Oldfield will now be the star feature of the Empire City track meet, Saturday, June 4.

This fiasco puts an end entirely to America's hope to be well or at all represented in the international cup race, which is to be run over the Taunus road course, in Germany, June 17.

Representation has been doubtful for several weeks, but when the Automobile Club of America decided to give all of the entrants another trial to-day, on the Empire City track, in a 200-mile race, a new lease on hope was taken, and it was expected that some, if not all three of the entrants, would make good and be accepted.

Unless other countries drop out there will now be seven countries in the race, or twenty-one actual contestants.

American interest in the G. B. race, the international cup race, the Gordon-Bennett race, the James Gordon Bennett international trophy race, or whatever you want to call it, is now limited to betting on which European will get the glory.



LOUIS P. MOOERS—PEERLESS

WALTER CHRISTIE—CHRISTIE

BARNEY OLDFIELD—WINTON BULLET II

BRITISH CARS SELECTED

S. F. Edge, Napier, and Sidney Girling and Charles Jarrott, Wolseley, Selected To Represent England in the International Cup Race—Story of Concluding Events of British Trials

London, England, May 13—One Napier car, driven by S. F. Edge, and two Wolseleys, driven respectively by Sidney Girling and Charles Jarrott, will constitute the British team in the James Gordon Bennett international cup race June 17. This was decided last evening by the race committee of the Automobile Club of Great Britain and Ireland, as a result of the 3 days' trial on the Isle of Man. As reserves will be two Napiers, manned by J. Hargreaves and J. W. Stocks.

The decision has not met with universal approval, however, as it is thought the Napier car driven by Earp should have been selected, inasmuch as it certainly made a better showing all around than one of the Wolseley machines which the committee decided should represent the country in the international event.

The second day of the preliminary trials was devoted to a hill-climbing test on the Ramsey hill, the cars being timed over a half-mile stretch with a grade of 7 per cent. Four Napiers and three Wolseleys which had survived the 250-mile road test of the day before made three trials each and again Edge with his big Napier proved the fastest.

None of the three Darracqs started, as all had been put out of business the day before. Mark Mayhew, Napier, had withdrawn also, as well as Campbell Muir, Wolseley, but inasmuch as the latter's trouble had been merely a puncture he took part in the hill test. The times made in the trials were:

| | | | |
|--------------------------|---------|---------|---------|
| J. W. Stocks, Napier... | :58 | :57 1-5 | :55 1-5 |
| John Hargreaves, Napier | :50 2-5 | :52 | :51 |
| Clifford Earp, Napier... | :44 2-5 | :42 4-5 | :43 4-5 |
| S. F. Edge, Napier... | :38 2-5 | :39 | :39 4-5 |
| Sidney Girling, Wolseley | :44 1-5 | :44 3-5 | :43 3-5 |
| Chas. Jarrott, Wolseley | :47 3-5 | :48 1-5 | :51 3-5 |
| Campbell Muir, Wolseley | :50 1-5 | :51 2-5 | :50 4-5 |

The straightaway speed trials, the concluding event of the tests, were run yesterday over the 2-mile boulevard at Douglas, the starting and finishing point of the Isle of Man course used for the road trials Tuesday. The trials had aroused much interest on the island and yesterday Douglas was thronged with country folk come to see this short distance speeding.

Eight cars took part, for C. Rawlinson brought out one of the unfortunate Darracqs. Otherwise the starters were the same as in the hill-climbing test. But two trials were given each contestant, the third trial being called off, owing to an accident to Clifford Earp, Napier, just after the running of the second trials. This accident injured both Mr. Earp and his brother and smashed the car, which otherwise would in all probability have been selected as one of the English team instead of one of the Wolseleys.

Edge was fastest of all and in each of his two attempts drove his 80-horsepower Napier over the flying kilometer in 39 seconds.

The trials were started at noon and each was timed from a standing start over ¼-mile. Then it was timed for a flying kilometer, making the total distance .87 of a mile. This composite trial had been decided upon in order to determine the ability to get under way quickly as well as to drive at high speed from a flying start. The course was not the best,

having in it three bends and being marred by street car tracks. The times made in the flying kilometer trials were:

| | | |
|--------------------------------|---------|---------|
| S. F. Edge, Napier..... | :39 | :39 |
| Clifford Earp, Napier..... | :42 | :42 3-5 |
| Sidney Girling, Wolseley..... | :44 4-5 | :43 |
| Charles Jarrott, Wolseley..... | :45 2-5 | :45 3-5 |
| C. Rawlinson, Darracq..... | :46 3-5 | :48 3-5 |
| Campbell Muir, Wolseley..... | :47 | :47 |
| J. W. Stocks, Napier..... | :47 1-5 | :48 1-5 |
| John Hargreaves, Napier..... | :49 3-5 | :47 3-5 |

The accident to Mr. Earp did not occur during the actual speed trials, but was due entirely to a display of injudicious driving on the return journey up the course. The competitors were proceeding on the backstretch for a third time, when Mr. Earp found he was approaching somewhat too near to a barrier stretched across the road at the southern end of the course.

He put on his brakes too abruptly and the car skidded either on the tramway lines, or, owing to the fact that the road shelved deeply toward the edge; the result was that while traveling at high speed the car dashed into a wall and was completely wrecked.

Mr. Earp and his brother, who acted as his mechanic, were picked up senseless. No spectator should have been on that side of the road, but a youth who strayed in that direction was struck by the car, but was not seriously hurt. The driver's brother sustained a slight fracture of the skull, but Clifford Earp was only stunned and bruised.

On hearing the decision of the race committee, S. F. Edge wrote a letter of protest against its action in withdrawing Mr. Earp from the race team after his excellent performances. Mr. Edge said he regarded the decision as illogical and premature, seeing that Mr. Earp had been selected as second string in the team. If Mr. Earp is not allowed to compete he, Mr. Edge, says that he will decline to allow his name to be included among the English representatives.

CUP WEEK TRACK RACES

The German Automobile Club has published the program of the race meet which will be held at Frankfort-on-Main, June 19, following the international cup race. It is expected that several of the drivers in the James Gordon Bennett race will take part in the track events, for which about \$1,000 in cash and many art prizes will be given. The program in detail is as follows:

Three-mile motor cycle race for amateurs. Total prizes valued at \$175.

Five-mile race for cars not weighing more than 880 pounds nor of more than 15 horsepower and using alcohol for fuel; professional drivers; each car carrying a passenger. Total prizes \$150.

Five-mile race for cars not weighing more than 880 pounds and with one or two-cylinder motors of not more than 14 horsepower; amateur drivers; each car carrying a passenger. Total prizes valued at \$275.

Ten-mile race for cars not weighing more than 1,430 pounds nor with motors of over 40 horsepower, and using alcohol for fuel; amateur drivers; each car carrying a passen-

ger. First, second and third prizes donated respectively by Emperor William, the German Automobile Club and the Automobile Club of Frankfort.

Eight-mile race for cars weighing not more than 1,320 pounds and of not more than 24 horsepower; amateur drivers; each car carrying one passenger. Prizes valued at \$312.

Ten-mile race for touring cars weighing not more than 2,200 pounds including four passengers and of not more than 30 horsepower; amateur drivers. Total prizes valued at \$275.

Ten-mile race for cars weighing not more than 1,320 pounds; amateur drivers; each car carrying one passenger. Winner to get \$1,250 challenge cup now held by Willie Poege; other prizes valued at \$250.

CUP RACE ARRANGEMENTS.

Count Sierstorpf, of the sports committee of the German Automobile Club, while in Paris May 3, said the club had decided that the following localities on the Taunus route would be neutralized: Usingen, Weilburg, Limburg, Idstein, Königstein, Obersursel and Homburg. It will require 43 minutes per circuit to pass through these seven localities, and as there will be four circuits there will be a loss of 2 hours 52 minutes.

An immense board will be put up near the press and grand stand. Upon this will be given information on the progress of the race. It is possible that flags will be used to indicate the nationality of the cars.

The route will be guarded by 4,800 men, not including those at the start. Nearly 18 miles of crossings will be barred with wire fences. The grand stands are being finished and will be nicely decorated. The builders have been given plenty of time to build them securely. The telegraph and telephone office which the government is having erected cost nearly \$20,000 and will be spacious and well-equipped. It will be located near the start and finishing point and be guarded, so that newspaper men will not be inconvenienced in their duties.

The count added that as the date of the event is approaching the nation is becoming more interested in the matter. "It is no more spoken about as simply an automobile race, interesting only the automobile trade and its followers, but it is now spoken about as a national event, which will have a tremendous counter effect upon the automobile trade of Germany should we win the race." The kaiser although overwhelmed with all kinds of political matters, has given instruction that he be posted on everything concerning the event.

JUNE 17 A HOLIDAY

Emperor William has formally sanctioned the James Gordon Bennett international cup race to be run in Germany June 17. By his order the day of the race has been declared a legal holiday throughout the entire territory of Wiesbaden, the section in which the cup race course is situated. The schools and the governmental municipal offices will be closed.

MOTOR DAY IN DENVER

In Denver, Col., May 31 will be automobile day. In the morning there will be a parade of as many of the local automobilists as can be gotten to participate. In the afternoon there will be an open air show by the dealers of the city, this feature being in connection with a track race meeting. The program of the latter includes thirteen races for all classes of machines.

TALK OF AMERICAN TRIALS

This Week's Try-Out of International Cup Race Candidates Discussed on All Sides—Gossip of Track Aspirants—Looking at Virginia Beach Again—Louis Mooers Arrested

New York, May 15—Pending the result of the 200-mile trial of the candidates for the American team in the international cup race at the Empire track next Thursday discussion as to whether or not the automobile club should cancel its entry has been halted. The hope is general and sincere that all or at least one of the cars will make good, that there may be no prolongation of a discussion both injurious and humiliating to the American sport and industry.

Now that the committee has yielded to the appeal of the entrants and the very general desire of the fraternity for another trial should a second failure be scored, it is more than likely that public opinion will be against the further heroic pursuit of a forlorn hope on the mere grounds of so-called sportsmanship and getting useful experience from defeat. It may be stated with assurance that the temper of the committee is against sending any car that fails to make good in this second trial which has been given it.

The committeemen are somewhat nettled at the criticisms of the insufficiency of the tests they gave the candidates and hint at the development of defects beyond those alleged by their makers as the only causes for the failure of their cars to make good. The decision to grant a second trial, of course, smothered whatever report the committee could have made of the state of affairs as it found it from the first tests.

"It was not our fault," said one of the committee to a *MOTOR AGE* man, "that the cars stopped and could not even reach the hundred mile limit we set. The printed reports of what happened to the cars rest entirely, you must remember, on the statements of their makers and drivers, who desired another trial and would naturally wish to conceal facts that might result in their rejection or public prejudice. It is to be hoped that the second trial will result in all of the cars making good. In any event their builders cannot say that every chance was not given them."

The general impression is that the proposed test will be sufficient enough to justify the committee in sending to Homburg any car that can go the 200-mile run in creditable time. The course is now in use by 300 trotters and cannot be rolled into race meet condition. Its softness will give a fairly difficult test and the constant turns will reproduce the many curves of the German course. In the absence of any road available for racing it is surely the best course the committee can offer under existing conditions. It is not thought that the constant and gradual turning will be so very much more of a strenuous strain on tires and machines than the sharp curves of the Homburg course could present.

An error was made by *MOTOR AGE* in interpreting the telegraphic despatch on the conditions of the second trial. As in the real race gasoline and water must be taken on board the car outside the control and poured into the tanks inside the control. This rule is presumably to give a car that can run a long distance without having to stop for gasoline

or water due advantage and credit in its aggregate running time.

The trials will not begin before 1 o'clock in the afternoon and possibly not before 2 o'clock, as they will have to follow the training spins of the trotters, whose owner has courteously consented that day to crowd them into the forenoon hours. President Butler's courtesy in giving the club the use of the track for the trials at so great an inconvenience to its proper tenants is being commended and is another illustration of the strength of the fraternity the good roads crusade has created among the horsemen and automobilists of the metropolitan district.

President Butler also favors open gates that day, believing that the trials can thus be made a boom to automobile racing and that the tests are a matter of general patriotic interest. He has, however, given the club the control of the track that day, reserving for the members of the New York Driving Club their right of access to the track at all times. Though no announcement of wide open gates will probably be made, it is likely that the trials will be practically a public one.

It is said that Oldfield and the Bullet will be here to-morrow. Mr. Mooers says that the two Peerless cars will arrive on Thursday morning. Though no announcement has yet been made by Mr. Mooers it is believed that Charles G. Wridgway and Joe Tracy will drive the Peerless candidates. Secretary Reeves, of the Empire track, says that owing to its use by the trotters the cup cars and drivers will have no chance for practice on the track before the trials.

Several New York cars will be among the participants in the meet at Point Breeze, Philadelphia, on May 28, and at the Readville, Boston, races on Decoration day. At the former the Stevens-Duryea "Spider," which holds the world's mile straightway record of 57 1-5 seconds in the voiturette class, has been entered by Woolston & Drew, of this city. At this meet Nathaniel Huggins will also start his 40-horsepower Decauville racer, a twin machine to the Henri Page car that scored a 15-mile track record last season. Hilliard, his chauffeur, will drive it. If possible the car will be shipped to Boston in time to run on the following Monday. The 60-horsepower Fiat, a counterpart of the international cup racers to be driven by the Italian team in the Homburg contest, which is expected to reach this port on Wednesday, will also be driven by Claude Fogelin in the free for all for the Boston Herald cup that day. E. D. Hollander will also drive a 24-horsepower Fiat in the 5-mile race for touring cars with all on, limited to that power.

Joe Tracy will surely make an attempt with the 1903 Peerless cup racer to lower the Commonwealth avenue record of 15 2-5 seconds scored by S. H. Bowden, Mercedes, and H. D. Hills, Richard, on April 19. The car had trouble with its gears that day and was left in Boston. When new gears are fitted the Chronograph club has consented to time Tracy's attempt.

Glen D. Stuart, former manager of Barney Oldfield, is having built at Buffalo two 70-horsepower racing cars, whose completion is expected within 2 weeks. They will be driven by John J. Lavin, a former pacemaker for Eddie McDuffie, and Luty Callahan, a cycle racing veteran.

W. H. Pickens, the owner of the Ford 999, is negotiating with Eddie Bald to be its driver in exhibition and open races this season. But the former cycle champion is at present at the Electric Vehicle Co. factory studying the mechanism of the Columbia gasoline car with a view to acting as a salesman and demonstrator of it and also of piloting a racing car of that make should the company decide to build one.

Lee Straus, who brought about the premature inspection of Virginia beach as a race course when it was in no condition to do itself justice, has returned from another inspection of it and pronounces it now in ideal condition for racing. Accordingly he has applied to the racing board for a sanction for September 26.

"I went all over the beach," said Mr. Straus yesterday, "and found for about 7½ miles, from the Princess Anne hotel to the wreck, as fine a stretch for racing as I have ever seen. On this we will conduct races of from 1 to 5 miles, and every race will be in plain view of the beach walk."

It is said that Harlan W. Whipple, president of the A. M. A., intends to take his new 80-horsepower racing car from Baltimore to Virginia beach to give it a trial.

Louis P. Mooers was arrested for speeding on Saturday and had to appear in court yesterday morning and pay a \$5 fine. He was driving a Pierce motorette at the time.

CLEVELANDERS CONFIDENT

Cleveland, O., May 16—Louis P. Mooers of the Peerless company has returned from New York and has rushed the work of pulling the two Peerless cars to pieces to repair the defects that caused the trouble at the first elimination trials last week. He stated that by polishing the pistons slightly, all danger of the recurrence of the former accident would be eliminated. Mooers expressed himself as greatly pleased with the courtesy shown by the race committee and he says that if either of his cars fail to show up satisfactorily he will have nothing more to say. Both Peerless cars will be shipped to New York tomorrow evening. With Mr. Mooers will go W. H. Starring, who was with Mooers in Ireland last year, who it is expected will drive the second Peerless car in the elimination trial.

Winton Bullett II is already in New York, having been shipped from the factory Saturday evening. Charles Shanks says that the car is now in perfect condition, the parts that gave trouble before having been repaired and strengthened. Barney Oldfield leaves for New York today and he is taking with him an abnormal amount of confidence in his ability, not only to make a showing in the second elimination trial, but in his chances for scoring in the big contest itself.

NEXT NICE MEET IN FEBRUARY

At a recent meeting of the sports committee of the Automobile Club of Nice, France, it was decided to hold the annual meeting next year between February 5 and 19. An effort will be made to induce more prominent drivers to participate in the races.

MOTOR AGE

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DOING A GREAT GOOD

AUTOMOBILES are continually held up to the public by motorphobes as dangerous enemies to society. Some of the great daily papers of the country are not past the stage of vituperative editorials tending to create a popular antipathy toward automobiles, automobilists and automobiling.

Farmers have organized to hunt with shot-guns for automobilists.

A great sentiment has been stirred up against the modern vehicle. It will probably be unavailing in the long run, but just now it has placed all automobilists upon the defensive in the use of the highways. They have been branded criminals and must prove themselves otherwise.

Yet all the time the automobilists are reformers. They have started a movement so far reaching in its effect upon society that it is hardly realizable.

The beneficiary results of automobiling made common can be recited without end. Many of them have already been brought to the attention of the public. Like the seeds of all reforms, they will be sown and resown before the good, slow old "public" fully awakens to the kind of fruit that may be harvested.

Many single phases of automobiling are of mammoth proportions when considered in the full extent of their possibilities. Take the effect automobiling is now having on the real estate business. In what is casually but a commercial matter of more or less importance is a great movement toward a different way of living.

Real estate men say that automobiling has increased the value of country and suburban property.

This means that even with the number of automobiles in use today, owners thereof have created a marked tendency toward the increase of suburban residence.

Multiply this number of automobiles by hundreds and even thousands and the rush to the country will be astounding.

A Minneapolis real estate man speaks upon this subject as follows:

"As a general proposition the comparative value of real estate depends upon its accessibility to the business district, physical features being equal; and any agency that will tend to reduce distances, as the automobile un-

questionably does, must inevitably enhance the value of outlying property, while it may, conversely, reduce values slightly in the district nearer down-town.

"The owner of an automobile who lives, let us say, on the shores of a suburban lake, is at least, a half hour nearer to his office than the man who depends upon street cars, and if his time is worth anything, he is just that much ahead. In other words, his property is worth an hour more a day to him than it was before the automobile was made a practical adjunct of metropolitan transit.

"The automobile, then, should increase the value of property in the vicinity of the lakes and in suburbs generally, and should open up large tracts of picturesquely located property to settlement.

"Even in the east, where the automobile is being used more generally than it is here, its importance as a factor that must be reckoned with in the real estate market has not been appreciated, but a few minutes' consideration will persuade any one that the automobile, when its utilitarianism shall become recognized by people generally, will mean a practical overturning of present real estate values."

The automobile takes people into the country more conveniently than any other medium. More surely than any other medium it links the town with the country.

Both as a private vehicle and as a vehicle of public service it provides a class of suburban transit not realizable in any other way.

It assures that rich and even moderately prosperous men may have their homes in beautiful but heretofore inaccessible country places and still be within easy reach of the city place of business.

It means that public service routes may be established which better than trolley or train will take a man from his country home to his city place of work.

If those reformers who are just now seeking to counteract the tendency toward over-population of the cities will make the automobile one of their agents, they will find in it a means beyond compare to an end so sweeping in its effect that the whole countenance of metropolitan society will be changed.

Good roads and good automobiles will do more for society than society imagines.

MOTOR BICYCLE WEIGHT

FROM various sections of the country there has come a strenuous protest against the proposed limitation of motor bicycle contests to machines weighing not more than 110 pounds.

This contemplated action is due to resolutions passed a short time ago by the Federation of American Motocyclists, in which resolutions the National Cycling Association, which controls motor cycle racing, was asked to set this maximum weight upon all competing machines.

Immediately upon the publication of the adoption of these resolutions, motor cyclists set up a howl. Two of the several letters upon the subject which have reached MOTOR AGE are published in another page of this issue.

The National Cycling Association has not taken action definitely in the matter and it may not revise its rules in accordance with the request of the F. A. M. As a possible revision, however, the projected weight limit and the protests of motor cyclists to it are deserving of consideration.

Those responsible for the resolutions have doubtlessly aimed with good intention, but

have aimed too low. They probably sought to so restrict motor bicycle contests that the practically useless racing freak would be barred. In so doing they named a weight limit which substantially bars all but one of the commercially prominent styles of motor bicycles.

It may be true enough that 110 pounds is heavy enough for any motor bicycle for ordinary usage. It may not. The F. A. M. is not exactly in a position to pass final judgment upon such a point with a view to radical "reformation" of motor bicycle manufacture.

Many motor cyclists of experience claim that the heavier machines are, better for cross-country work than the lighter ones. The point is one of the unsettled features of a young industry. The F. A. M. is jumping at conclusions in seeking to lay down hard and fast lines for a sport that is just beginning to be developed.

Racing freaks are not to be encouraged. They serve no practical purpose. On the other hand, there are many good motor bicycles which weigh more than 110 pounds and which are far from being freaks. These machines, their makers and their riders have a right to be recognized in American motor cycling contests.

To place an arbitrary limit upon motor bicycle weight at a time when the construction of motor bicycles is far from standardized and in a measure that shuts out of the sport the machines of a dozen of the prominent manufacturers, some of them pioneers in the field, would be unjust, short-sighted and suicidal.

It is to be hoped that the National Cycling Association will not accede to the request of the Federation of American Motor Cyclists; or, better still, that the latter body will modify or withdraw its resolutions.

INTERNATIONAL RELATIONS

IT IS said British automobile manufacturers and dealers are alarmed at the latest board of trade returns, which show a decrease of exports and an increase of imports of automobiles. In January, for instance, 335 automobiles were imported into England and only fifty-five exported. However, seventy-eight motor cycles were exported against fifty-one imported in that month. But in parts of motor cycles, ten imports exceeded the exports nearly fourfold. The excess was still greater in the imports of automobile parts, being fivefold exports. In fact, there are really no all-British-made automobiles. Those turned out there contain parts imported from the United States and the continent. France has a long lead in the making of automobiles. England, hampered for years by adverse legislation, has only fairly begun, and hopes in time to overtake France. But, as noted above, the latest returns of foreign trade are disturbing.

Official figures show that the shipments of automobiles from the United States to its non-contiguous territories are increasing in value. Shipments to Hawaii increased from \$1,900 during the 9 months ending March, 1903, to \$4,333 during the same period of 1904. The shipments to the Philippines increased from \$2,085 to \$3,152 during the same period. There was, however, a falling off in the shipments to Porto Rico, the value declining from \$7,323 to \$2,500 during the periods under consideration. In the course of time the noncontiguous territories of the United States will offer an inviting field for American automobile manufacturers and they will do well to study thoroughly the needs of these countries and thus get in on the ground floor.



The alcohol motor car is sure to come. Atlantic City has a motor police patrol that is used exclusively for the conveyance of intoxicated persons.

A Columbus newspaper, in reporting a 250-mile automobile trip, says that Sinking Springs was the last stop. It surely ought to have been.

General Kuropatkin ought to have a few racing automobiles to do his retreating stunt in up-to-date style.

Emperor William has made the day of the international cup race a holiday. Hoch der Kaiser!

Those wonderfully fast automobile boats are pretty slow about coming out.

JUMP SPARKS

Good morning, have you secured an injunction yet?

The mayor of Syracuse, N. Y., is to take the members of the city council out for an automobile ride and dinner. What's the game, Mr. Mayor?

There are a few people who still question the reliability of the automobile, but they probably haven't heard that an English machine ran over a thousand miles before the motor was stopped—not before the motor stopped, mind.

On the tour to St. Louis, when the Illinois roads are met, there will be no wild scramble to get to the front; the wise motorist will bring up the rear and receive the benefit of the improvement the automobiles ahead of him will make in the roads.

It is the fashion now to entertain foreign potentates, princes and other royal personages by giving them automobile rides. A member of the Chinese royal family has thus been entertained in almost every town from San Francisco to Chicago. Pretty soon nothing will satisfy his princelets but a balloon ascension.

One, two, three or four cylinders?

Air or water cooled?

Chain or shaft drive?

Pneumatic, cushion or solid tires?

Jump or make and break ignition?

Sliding or planetary gear?

Will some one please settle these burning questions?



There has been erected in front of the garage of the Chicago Automobile Club a sign reading: "For Members Only." It's a shame the fellows cannot take their cars in too.

E. J. Pennington has again failed. This is not so surprising as that the people of Cleveland should let him get into business far enough to be able to fail.

Fame is a great thing. An Illinois newspaper refers to England's premier racing automobilist as "a man named Edge."

What's the matter with starting now to build some racers for the 1905 international cup race?

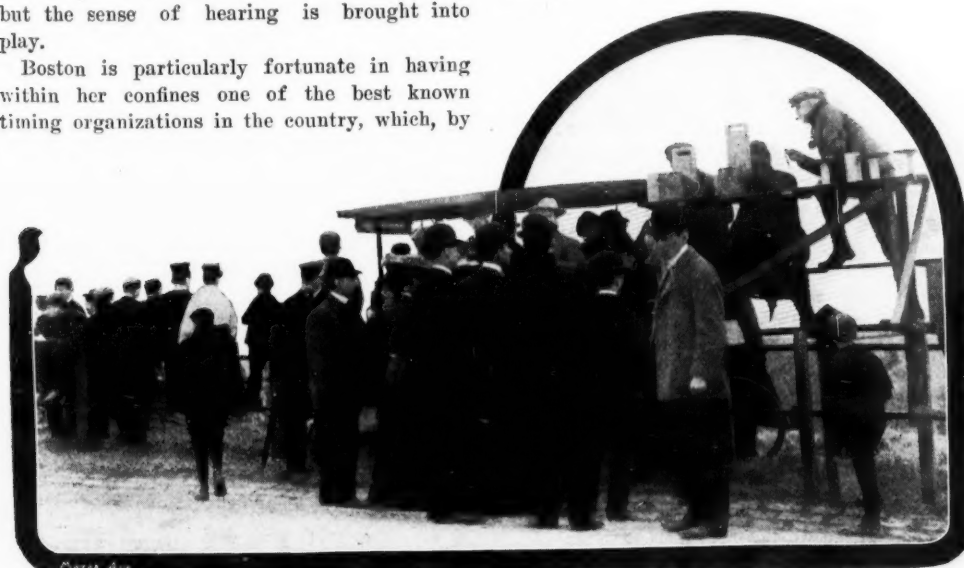
What yarns a valet can tell when he quits his master's service!

TIMING AUTOMOBILE EVENTS

The timing of speed contests of any sort, and particularly an automobile event on a straightway course, is a most exacting undertaking, one that cannot properly or accurately be performed by any and every man. The holding of a watch on an event on a circular track requires considerable practice and familiarity with the delicate timepiece, and when it comes to applying the same principles to a straightaway event, such for instance as that of the recent hill-climb in Boston, the task becomes twice as difficult, for not only is the eye to direct the brain and the hand, but the sense of hearing is brought into play.

Boston is particularly fortunate in having within her confines one of the best known timing organizations in the country, which, by

the way, has gained considerable fame through its ever efficient work, and which is known the country over as the Chronograph Club of Boston. Formed some dozen years ago to bring about a reformation in the timing of bicycle races and bicycle record trials, the club has kept pace with the vehicular developments and while still paying particular attention to cycling has not overlooked the timing of automobile contests, as proven by the fact that in automobile circles as in the cycling world the club's times are recognized as official and accurate.



CHRONOGRAPH CLUB CLEARED FOR ACTION

The illustration shows the stand at the finishing mark of the recent hill-climbing contest, with the three officials busy studying the results of the last trial; in this instance it was the ride of H. B. Hills, Jr., who has just crossed the tape. The only gentleman recognizable is George H. Lowe, Boston manager of the White Sewing Machine Co., one of the best known and most able timers in the organization. The gentleman who is concealed by the telephone and who is seated to the right of Mr. Lowe, is Charles E. Fay, for years secretary of the club and who is now identified with an automobile company. The third man, who is hidden by the tapper, is President J. C. Kerrison, who has held that position for a great number of years.

The system was laid entirely by the members of the club and was found to work most admirably, there not being a single instance when the machines failed to record the starting or finishing of a car, and the fact that not over 5 minutes intervened between cars shows how well managed was the timing. A telephone communication was maintained between the two stands every moment. As a car was ready to start word was sent over the 'phone, and then as it crossed the line at the finish the fact was announced by the ringing of the "tapper" and also over the 'phone, both systems being independent of each other, so that if one had failed to perform its proper function, which was not experienced, the other could be relied upon. Then the same method marked the finishing.

TOUR IN LITTLE STATE

Motorists From All Sections Visit Rhode Island on Sundays—A Disagreeable Accident

Providence, R. I., May 15—There is a great deal of touring in this part of the country even at this early date, and last Sunday all of the garages in the city were overcrowded with motorists who came from all parts of Massachusetts and Rhode Island. Almost all of those who visit this city come from points north, and the scarcity of tourists from Connecticut has been one of the most notable features of the season thus far. The automobilists of this city explain this by calling attention to the poor roads that Rhode Island has provided over which automobilists must come, and they say that if the roads could be improved, especially along the shore, that the number of visitors would be very much increased.

Harlan W. Whipple, president of the American Automobile Association, was in this city Thursday evening, having come from Boston in his Mercedes car. Mr. Whipple met the board of governors of the Rhode Island Automobile Club at a special meeting and explained to them the attitude of the officers of the American Automobile Association in favoring the merger of that organization with the American Motor League. At a meeting of the American Automobile Association last week the Rhode Island and the Massachusetts clubs were the only members not represented, and they therefore expressed no opinion on the proposed merger. Mr. Whipple learned that these clubs did not know enough about the situation to warrant an opinion, and he came to Boston and Providence to do a little missionary work. He explained the question to the board and then left for New York. No action will be taken by the local club until the next regular meeting, which will come on the first Wednesday in June.

M. Maurice Dimond, of this city, had a disagreeable experience with his Winton the other day, which was not, by the way, due to any fault with the machine. When he received the car not long ago somebody told him that, in order to protect the working parts from dust and dirt, a leather boot should be stretched underneath, and he took the suggestion seriously and carried it out. While riding along the Apponaug road with his chauffeur a sheet of flame suddenly shot out from both sides and he and the driver climbed out as rapidly as possible. They managed to put out the fire by throwing dirt on the flames, but only after considerable damage had been done. Mr. Dimond says that oil and gasoline had dripped down into the boot and that something ignited the inflammable combination and the fire resulted. An automobile from this city towed the damaged machine to the garage.

FRISCO MEET PLANS COMPLETE

San Francisco, Cal., May 13—The Automobile Club of California is losing no time in making preparations for the race meeting which is to be held next month. At a recent meeting of the committee in charge of the program it was decided that the events would be divided into two classes, instructive and spectacular. On one day the practicability of motor cars will be shown, and on the other the lovers of exciting sport will be given the kind of races they like.

One of the novelties will be an Australian pursuit race, divided into two heats, one for ordinary touring cars and the other for cars stripped for racing purposes. There will also be a long-distance race, probably over a distance between 20 and 30 miles. This race will be exclusively for touring cars carrying at least two passengers and a dead weight equal to the average weight of two persons if there are not more than two people in the car.

Officials will keep track of the amount of gasoline consumed in this race, which will enable some interesting figuring. It is open to gasoline and steam vehicles.

There will be several match races, and much interest is already centered upon the event in which the Pope-Toledo and the White cars will meet. A perpetual challenge cup race will also be arranged. Clubs only are allowed to challenge for this event.

YONKERS MEET ASSURED

New York, May 17—It has been finally determined by the Empire City track management to run a race meet at the Yonkers record-breaking course on Saturday, June 4. The delay in making formal announcement has arisen from the uncertainty Secretary Reeves has encountered in securing a star attraction, without which this experienced showman did not care to undertake the promotion of a meet. The doubt as to whether Oldfield, the chief metro-



SYRACUSE MOTORISTS' ONE GOOD ROAD

politan favorite, would go abroad for the international cup race or remain in this country for the track circuit, had much to do with the uncertainty of running the meet. Lately, however, the possibility of securing other star attractions has increased and decided the Empire management to go ahead. The feature match of the day will be announced later.

The program of open events announced is as follows, the new international classification being employed:

First Event—Fifteen-mile free for all—For machines of any motive power, from 1,432 to 2,204 pounds.

Second Event—Ten-mile race—For machines of any motive power, from 881 to 1,432 pounds.

Third event—Two-mile race—For machines of any motive power, from 551 to 881 pounds.

Fourth event—Five-mile. Great Empire Handicap—For machines of any motive power and weight. The handicapping is to be done by E. T. Birdsall and A. L. Riker, the technical committee of the racing board.

In each event the prizes will be silver trophies of the value of \$100 for first and \$50 for second.

BOASTS ONE GOOD ROAD

Small Stretch Near Syracuse Only a Sample of What Is Possible All Over the Country

Syracuse, N. Y., May 15—The completion of half a mile of as perfect macadam road as was ever built in Onondaga county is the signal for much enthusiasm on the part of the residents of Salt Springs avenue, which extends from East Genesee street, or the Fayetteville toll road, east to Headson's in Dewitt, and has a fork to the right connecting with the toll road. With this exception the roads in Onondaga county and central and northern New York were never worse.

Some time ago Dewitt voted the tax system of caring for the public highways, and the work in district 14, under the direction of Commissioner Bogardus, of Messina Springs, is one of the best illustrations of the feasibility of the system. The new stone road has been carefully built and is hard, smooth and broad. It is already attracting attention on the part of Syracuse people who drive their automobiles in the country frequently during the summer season. Yesterday afternoon the new road presented an animated scene, many fine turnouts from the city being in evidence. East over this road to Headson's and returning through James street makes a popular short distance drive.

For 19 years Pierce W. Ball, a prosperous farmer on the Salt Springs road, served as pathmaster. He took pride in the condition of the road and he required every taxpayer in the district to work out his tax in a thoroughly business-like way. Sometimes the residents along the road complained because of his strict method, but it resulted in laying a foundation that was far above the average of country roads, and when it came to building the macadam road it was accomplished with good results. The road is about 2½ miles long, and the plan is to macadamize more of it as soon as it is possible to secure the crushed stone.

Along this thoroughfare there are many handsome country residences and well-kept farms. Former Senator Frank Hiseock, William K. Niver, Dr. H. D. Didama and Alexander McCall, former chief of police, are among the property owners. Pierce W. Ball has one of the largest and most attractive places, and the home of Arthur B. Morse adjoining the Niver property attracts attention because of its well-kept condition, spacious lawn and fruit orchard.

BIGGEST PARADE IN WEST

Chicago, May 17—Next Saturday's automobile parade arranged by the Chicago Automobile Club will start from the vicinity of the club house at 2:30 p. m., rain or shine. From present indications it will be the greatest parade of automobiles that has yet been attempted in the west.

There will be five divisions, which have been arranged as follows: First division, American and foreign touring cars, Jerome A. Ellis, marshal; second division, light gasoline cars, Andrew J. McDuffie, marshal; third division, steam cars, Henry J. Ullman, marshal; fourth division, electric vehicles, W. R. Mason, marshal; fifth division, commercial vehicles, J. B. Burdette, marshal.

The route of the parade will be north on Michigan avenue to Jackson boulevard; west

on Jackson boulevard to Ashland avenue, where a turn will be made to get back on to Jackson boulevard. When Michigan avenue will have been reached the parade will south on Michigan avenue to Twenty-second street, where it will turn back on Michigan, going to the club house to disband.

Mayor Harrison and Chief of Police O'Neill will be guests of President Farson during the parade and ride with him in his car. All the members of the club have been urgently requested to participate and induce their friends, owners of automobiles, to join in the manifestation.

A luncheon will be served to the participating members and the guests of the club after the run.

MOTORING COUNCILMEN

Syracuse, N. Y., May 17—Mayor Alan C. Forbes has arranged a novel outing for the nineteen members of the common council and the heads of the city departments, who will be his guests Thursday afternoon and evening. The mayor will tender his guests an automobile ride to South bay and dinner at Crownhart's inn. He has engaged ten touring cars for the party, which will number about thirty-five. The start will be made from the city hall at 4 o'clock in the afternoon and the return in time to get copy in for next week's edition.

W. J. Beattie and J. C. Madigan, of Cohoes, stopped in Syracuse for dinner Saturday while on their way from Albany to Buffalo on a pleasure trip. They left Albany Friday afternoon and spent Friday night at Utica. The roads between Utica and Syracuse they reported were in a deplorable condition and considered themselves fortunate that their machine stood the test. The men rode in a 24-horsepower Thomas Flyer. The roads between Albany and Utica are in fairly good condition and that distance was covered in 6 hours. Messrs. Beattie and Madigan left here at 2 o'clock in the afternoon, spent the night at Rochester and resumed their journey to Buffalo the next morning.

Hulbert W. Smith, chairman of the New York division of the tours committee, has appointed his assistants as follows: R. M. Robinson and J. B. Taylor, of Albany; H. H. Mundy, of Utica; R. W. Whipple, of Binghamton; Lee Richmond, J. J. Mandery, Thomas J. Borthway, and Robert J. Thompson, of Rochester, and J. B. Eccleston, of Buffalo. The Yates hotel has been designated as the headquarters for the tourists the night they spend in Syracuse. Plans for their entertainment on that occasion will be made within a few days.

Secretary-Treasurer Frederick H. Elliott, of this city, has taken headquarters in the University block.

KIPLING CHIEF GUEST

Capetown Club Holds Banquet in Honor of the British Author, Who Talks on Motoring

Cape Town, South Africa, April 14—Rudyard Kipling, the poet, the prose writer, the story teller, was among the guests at the second annual dinner of the Automobile Club of South Africa. While there were many other prominent people present the man from England attracted the greatest interest and was in fine humor. A. T. Hennessy, president of the club, presided, and among those present were: T. J. O'Reilly, ex-mayor of Cape Town; Colonel Crewe, colonial secretary; W. Thorne, mayor of Cape Town; D. P. de Villier Graaf, vice-chairman; Commander Clinton Baker of the battleship Gibraltar.

In his address on "Our Guests," Vice-Chairman Graaf said among other things: "When motoring was first introduced into Great Britain it was thought necessary that legislation should be introduced against it. One of the acts passed was to the effect that no motor was allowed to go through the streets unless it was preceded by somebody carrying a red flag. As a result of this and other annoying decisions, motoring was taken over in France, where it was given a friendly reception and flourished. It was not only used for recreation and quick traveling, but for agricultural purposes as well, and it caused the mother country to look the question in the face and relax the existing restrictions, which killed the industry there for the time being."

Mr. Kipling combined anecdotes with serious talk, but the former were what the club members desired to hear. "Motoring is not in its infancy, but has reached the middle age. I knew the child, although I was not present at its birth, but I helped to nurse the rickety thing along. The men who deserve a statue, the men who deserve the consideration, love and affection of their fellow men, are the men—maniacs, as they called them and occasionally call them—who years ago

laid their right shoulders to the wheel and pushed the whole thing along."

The president of the club said in his address that the object of the Automobile Club of South Africa is to help the advancement of automobilism in South Africa. The club, which was organized in 1902 by six motorists and has now a membership of fifty-six. The drivers of motor cars in the colony are not hampered by any stringent laws and they have so far been very careful and made friends by their correct behavior. No doubt they would always keep in mind that there are other people using the roads and that while their pleasure may be to drive fast, they may do so under proper management and judgment. The members of the club are working together with the authorities, from whom they receive every possible encouragement.

The next meeting of the club promises to be interesting, several members having agreed to talk about different subjects concerning the manufacture and running of an automobile.

TOUR PREPARATIONS

New York, May 16—During the past week a large number of requests for information and entry blanks have come to the touring committee of the A. A. A., many of them being from western cities. In addition to the requests from individuals, many of the clubs and manufacturers have asked for a supply of the entry blanks and books for distribution among their members and customers. Nearly 4,000 of these books have been distributed, which shows the immense interest that is being taken in the tour to the world's fair.

Frank X. Mudd, the chairman of the Chicago committee, reports that he is gathering much information regarding western routes, and that great interest in the tour is being expressed in Minneapolis and St. Paul, as well as in other cities near Chicago. He reports that from present indications there will be fully 300 automobiles entered from his territory, in addition to the large number that will reach Chicago from the east.

Charles J. Glidden, the chairman of the Boston committee, who at present is abroad, will return in June and take up the active work of organizing the New England division. Mr. Glidden will start his tour of the world by going from New York to St. Louis with the run and from there to San Francisco.

A report from G. E. Varney, secretary of the Indianapolis, Ind., Automobile Club, states that there is much local enthusiasm there over the tour. Mr. Varney believes that the national highway, which runs through Indianapolis direct to St. Louis, is by far the best route for the eastern tourists on account of its directness and almost uniformly good roads.

Official Awards by the A. C. A. for the Service Test of Commercial Cars April 4 to 9

Full Report of Committee to Be Published by the A. C. A. Later

FIRST CLASS—TO CARRY 1,000 POUNDS OR UNDER

| No. | Maker | Description | Award |
|-----|---------------------|-------------------------|--------------|
| 7 | Olds Motor Works | Gasoline Delivery Wagon | Gold Medal |
| 8 | Olds Motor Works | Gasoline Delivery Wagon | Silver Medal |
| 4 | Knox Automobile Co. | Gasoline Delivery Wagon | Bronze Medal |

SECOND CLASS—A—TO CARRY 1,000 TO 2,000 POUNDS

| | | | |
|----|---------------------|-------------------------|--------------|
| 12 | Pope Motor Car Co. | Electric Delivery Wagon | Gold Medal |
| 5 | Knox Automobile Co. | Gasoline Delivery Wagon | Silver Medal |
| 11 | Pope Motor Car Co. | Electric Delivery Wagon | Bronze Medal |

SECOND CLASS—B—TO CARRY 1,000 TO 2,000 POUNDS

| | | | |
|----|------------------------------|-------------------------|--------------|
| 16 | Cantono Electric Tractor Co. | Electric Delivery Wagon | Gold Medal |
| 14 | Electric Vehicle Co. | Electric Delivery Wagon | Silver Medal |
| 2 | Charles Rockliff | Gasoline Delivery Wagon | Bronze Medal |

THIRD CLASS—TO CARRY 2,000 TO 3,000 POUNDS

| | | | |
|---|------------------------|-------------------------|--------------|
| 9 | Consolidated Motor Co. | Gasoline Delivery Wagon | Gold Medal |
| 6 | Knox Automobile Co. | Gasoline Delivery Wagon | Silver Medal |

FOURTH CLASS—TO CARRY 3,000 TO 4,000 POUNDS

| | | | |
|---|-----------------------|----------------------|------------|
| 3 | Union Motor Truck Co. | Gasoline Stake Truck | Gold Medal |
|---|-----------------------|----------------------|------------|

FIFTH CLASS—TO CARRY 4,000 TO 5,000 POUNDS

| | | | |
|----|----------------------|----------------|------------|
| 15 | Electric Vehicle Co. | Electric Truck | Gold Medal |
|----|----------------------|----------------|------------|

EIGHTH CLASS—TO CARRY 8,000 TO 10,000 POUNDS

| | | | |
|----|---------------------------|-------------------------|------------|
| 17 | Fischer Motor Vehicle Co. | Gasoline-Electric Truck | Gold Medal |
|----|---------------------------|-------------------------|------------|

RECORD AGAIN BROKEN

Time Between New York and Boston Cut To 8 Hours 57 Minutes —Hub Race Meet Plans

Boston, May 14—The New York to Boston record has again been lowered, or to be more correct, has been created, inasmuch as heretofore the records have always been made from Boston to New York, which is up hill, while on the other way has more descents, which may make some difference in time. Yesterday R. A. Green, of New York, came all the way from that city to Boston in a 16-horsepower Locomobile in 8 hours 57 minutes actual riding time, and 10 hours 27 minutes elapsed time.

On Friday morning Mr. Green, accompanied by his chauffeur, left New York at 3:15 o'clock, and made the run to New Haven, 79 miles away, in 2 hours 20 minutes, the best previous time for that distance having been 3 hours 20 minutes, made by Mr. Fosdick on his recent ride to New York. At New Haven one of the tires was punctured, which necessitated a loss of 30 minutes. While going through Hartford Mr. Green collided with a trolley car, bending his front spring and also his steering knuckle. An hour was lost repairing these damages. Springfield was reached at 10:15 and Worcester at 12:05 and the car pulled up at the B. A. A. at 1:42 o'clock, being checked by the MOTOR AGE representative.

The actual riding time was 1 hour better than that made by Mr. Fosdick, and the gain was made according to the schedule of Mr. Green in the 79 miles between New York and New Haven, the running time of both drivers between points eastward of New Haven being within a minute of each other. Mr. Green said the roads were in excellent condition.

The park commissioners surprised the knowing ones by last week throwing open the city park system, with the exception of Franklin park and the Arnold Arboretum, to the use of automobilists at all hours. This action on the part of the commissioners was received with approbation on the part of automobile owners and drivers, as it gives them virtually unrestricted use of the entire park system, the restricted territories being little used. This is a greater concession than what appears on the surface, as the Boston park system consists not of mere parks and breathing spots, but of park roads, extending for several miles into the country right from the very heart of the city.

The Back Bay Fens, one of the finest parks in the country, has heretofore been open to the use of motor vehicles in the morning up to 11 o'clock, but this restriction, now removed, permits what has long been desired, a right and opportunity to drive from Beacon street through the park system to Huntington avenue. It is only a question of a short time, if drivers do not violate the speed law of 10 miles an hour, before the entire system will be placed at their disposal. The parkways, so called, connect all of the several large parks of the city, and one can now enjoy a 15-mile ride over the very best boulevard roads without going outside of the park system. The Metropolitan park commissioners are now considering the advisability of throwing open some of their restricted territory.

Two additional cups have been offered to be competed for at the race meet of the Mass-

achusetts Automobile Club Memorial day. One of these, a \$500 cup, is known as the Boston Herald trophy, and the competition for this is open to all machines, irrespective of power or weight, the same to be won twice before becoming the absolute property of any one person. The cup is a massive piece of silverware and besides all things else shows the spirit in which automobilism is being handled by the Boston Herald. The second cup is to be known as the Fosdick cup, being presented by Harry Fosdick, and to be awarded to the person who makes the fastest mile, individual or intermediate, during the meeting.

Chairman Wallace has at last succeeded in getting a match between H. L. Bowden and H. B. Hills, Jr., the two men who were tied for the premier honors of climbing the Commonwealth avenue hill on Patriots' day. This race should prove most interesting, especially since it is to be ridden in the pursuit order. Claude Fogelin, the Fiat driver, is the first man to make an entry, while close upon his heels came those of H. L. Bowden, H. B. Hills, Jr., and Harlan W. Whipple.

HARD TEST FOR A MOTOR

Cecil Edge's attempt to drive his 15-horsepower Napier car 2,000 miles without stopping the motor came abruptly to an end after 1,107¾ miles had been covered, owing to the near-side chain suddenly snapping. The test was, however, very interesting and Edge and his companions had the satisfaction of breaking the previous record for a non-stop run by a little over 90 miles.

Up to Exeter, which is located 177½ miles from the starting point, the roads were fine, everything went smoothly, and permitted the gaining of almost an hour over the schedule time. Mr. Cundy took care of the car from there to Land's End, while Edge tried to take a rest. From Bristol to Worcester the roads were bad.

All through Lancashire great interest was taken in the test, and crowds were on the road, which became a little better for about 5 hours, after which, a snow-covered country was reached and trouble began. Several punctures caused much delay, but this was nothing compared to the narrow escape from a serious accident while riding through the pass of Killcrankie. This road is one of the most difficult in the kingdom and is about 20 miles long. Cundy was driving, and it was early morning and pitch dark. Owing to the snow which covered the ground the road could not be well distinguished and Cundy drove into a mountain stream, mistaking the snow covered bank for a bridge. Although half submerged the engine continued to run. After several hours of hard work the car was taken out and started again.

During all this time it rained, snowed and hailed at intervals, rendering the roads abominable and dangerous. At Golspie, after 1,107¾ miles had been covered, a chain broke, necessitating the stopping of the motor. This accident brought the non-stop motor test to an end, but after the car had been repaired the return trip was continued. The 880 miles between Land's End and John o' Groats were covered in 31 hours of actual road running.

When the Automobile Club of Great Britain and Ireland, in London, was finally reached a total of 2,086½ miles had been run in 136 hours 15 minutes, or 106 hours 15 minutes of actual driving, making an average of 19¼ miles an hour.

WOMEN GOOD MANAGERS

Those in Charge of Cleveland Parade and Race Meet for Nursery Benefit Make Rapid Progress

Cleveland, O., May 16—So many automobilists have already accepted the invitation of the Cleveland Day Nursery and Free Kindergarten Association to participate in the street parade on automobile day that this feature promises to assume proportions far greater than was at first thought possible. It has been decided to invite Mayor Tom L. Johnson to act as chief marshal of the parade and, in view of his enthusiastic interest in automobilism, it is probable that he will accept.

The parade will be formed in four sections, one each for steam, gasoline, electric and business cars. It has been decided that commercial wagons will form a separate section, but they will not be permitted to carry advertising banners or placards other than those used in daily service. Provisions will be made to head the parade with policemen in touring cars, while a large band will be carried on two electric drays.

The program for track events has been fully decided upon and is the same as that announced in a recent issue of this paper with the exception that there will be a brake contest.

The suggestion that box seats be auctioned has been vetoed by the automobile day committee, and instead, box seat tickets will be sold at a uniform price. Both box and single tickets will be placed on sale at the residence of Mrs. J. J. Tracy, 309 Euclid avenue, Monday morning at 9 o'clock. Further arrangements for the sale of general admission and grand stand tickets will be announced later.

The floral parade promises to be a pageant of beauty. The following are the entries thus far received: Mrs. Harrison G. Otis, Mrs. L. Dean Holden, Mrs. Howell Hinds, Mrs. Hal Hill, Mrs. A. C. Dustin, Mrs. J. J. Tracy, Mrs. F. B. Richards, Mrs. Erwin Fisher, Mrs. T. F. Newman, Mrs. Charles Strong, Jr., Mrs. Kirk, Mrs. F. B. Meade, Mrs. Arthur Climo, Mrs. F. B. Stearns, Mrs. Clara Blandin, Miss Eloise Vail, Miss Margaret Smith, Miss Mitchell, Miss Eva Climo, Miss Eleanore Malone, Miss Charlotte Rust, Mrs. L. Rosenthal, Miss Sullivan, Mr. Bascom Little, Mr. R. F. York, Mr. I. N. Topliff, Mr. Fred White, Mrs. Walter Baker.

Miss Charlotte Rust, of Euclid heights, is at the head of the floral parade committee and requests that intending participants in the parade notify her without delay, inasmuch as it is the desire of the committee to complete floral arrangements at once.

The executive committee of the Cleveland Day Nursery and Free Kindergarten Association has now completed its appointment of sub-committees to have charge of the various features of the work. The chairmen of these special committees are as follows: Ways and means, in general charge, Mrs. A. C. Dustin; publishing, Mrs. William McLauchlan; advertising in program, Mrs. Harvey D. Goulder; tickets and boxes, Mrs. J. J. Tracy; automobiles in street parade, Mrs. J. A. Garretson; music, Mrs. George Garretson; awards, Mrs. H. C. Wick; floral parade, Miss Charlotte Rust; children's parade, Mrs. Walter C. Baker; press manager, Mrs. Worcester C.

Warner; advisory committee, Cleveland Automobile Club.

Committees from the Cleveland Day Nursery and Free Kindergarten Association and the Cleveland Automobile Club met at the Hollenden Friday morning and decided upon the appointment of the track officials. These are one referee, six judges, five timers, one clerk of the course, one starter, two scorers and one announcer.

BAD ACCIDENT NEAR PARIS

One of the worst accidents happening since the automobile has been known was the one which occurred recently near Paris, at the Boissy-en-Brie railway crossing. The gate-man delayed closing the gates until about the time an express train was due. When he remembered the train was due, he started towards the gate. Just then a Panhard car having six passengers on board approached. A witness to the accident stated that he heard the gateman shout to the driver of the automobile that he had time to pass and the latter started to cross the track. The train was coming at a mile-a-minute speed and caught the rear of the motor car, lifting it and carrying it a quarter of a mile until the six occupants of the car were thrown out and cut to pieces. The automobile, after falling on the track, was made a pile of debris. The gateman was arrested and acknowledged that the accident was entirely due to his negligence. As usual many daily papers put the blame on the motorists, but it has been fairly well established that they were not the cause.

HALF-WEEK MEET AT ARRAS

In connection with the automobile show which will be held in Arras, France, a 3-days' race meet has been arranged, which will take place May 26, 27 and 28. A road race had been planned, but the governor refused to grant the necessary permission, and the organizers changed the program to a series of short-distance events. On the first day a mile standing start and a kilometer flying start competitions will be held, and the winner will be the one having made the best time in both events. A 5-kilometers flying start contest is scheduled for the second day, while on the last day a kilometer hill-climbing test has been arranged. About \$1,500 in cash and many art prizes will be awarded.

MEET FOR BUFFALO

Buffalo, N. Y., March 17—At a meeting of the board of governors of the Buffalo Automobile Club, held last Friday evening, a committee consisting of A. H. Knoll, J. B. Eccleston and F. J. Wagner was appointed to negotiate with the Buffalo Automobile Trade Association with the object of conducting a track tournament during the summer. The club and the trade organization are both favorably impressed with a meet, and the two committees will formulate some plan. F. E. Moskovics, of New York, was a guest at the trade dinner and stated that at least eight owners with cars from 40 horsepower up would go through the circuit.

ELOQUENCE IN SIGHT.

President Winthrop E. Searritt, of the Automobile Club of America, has been appointed by Mayor McClellan to represent New York at the national good roads convention at St. Louis. Mr. Searritt will deliver an address on "Good Roads, the Automobile and Civilization."

BARS MUFFLER BARKING

Police of Detroit Ordered To Place Under Arrest Motorists Who Permit Muffler Explosions

Detroit, Mich., May 17—The latest form of automobile persecution, and in many respects the most ridiculous, is the pronunciamiento which the Detroit police department has just issued—to the effect that hereafter any man driving an automobile in which there shall be an explosion in the muffler shall be arrested.

This order is brought about for no other reason than that the automobile men can discover than that some of local dealers and automobile owners object to some of the terms of the automobile ordinance which the local city fathers have forced upon the hundreds of automobile enthusiasts in this city. The man who has made the most strenuous fight against the ordinance and who is now carrying the question of the legality of the restrictions to the supreme court is John P. Schneider, one of the oldest dealers in the city and, by the way, a former member of the Detroit common council himself.

The other night Mr. Schneider was driving about the city with a party of friends. A little while after the theatrical performances were over the policemen on the beats in the heart of the city had just about settled themselves for the first of their evening naps when they were startled by a report which as it rudely interrupted their dreams, sounded to them like the report of a gun. There was a moment's hesitation while the sleepy cops rubbed their eyes, and then from all directions came the tattoo of police batons as the officers rapped out the riot call on the stone sidewalks, begging for assistance to put down an insurrection, or to prevent an invasion from the British possessions across the river. They were not exactly sure whether it was a riot, an invasion, or simply the looting of three or four banks at once, but they knew they needed help.

When the full squad of the central precinct had been gathered they commenced a series of careful reconnoissances, under the command of a sergeant. At last they had the spot from which the disturbing noise had come fully surrounded and all avenues of retreat cut off. A determined rush, defiant shouts and the party of maulers was successfully surrounded and in the hands of the minions of the law. Just as the rush was made Mr. Schneider was climbing back into his automobile, preparing to start on his way again after a short halt.

But escape was cut off, and after some parley Mr. Schneider, his friends and the automobile surrendered to the officers and were escorted under strong guard to the central police station. There Mr. Schneider explained to the lieutenant in charge that the sleep disturbing noise had been occasioned by an explosion in the muffler of his machine, such as occurs once in a while in the interior of even the best regulated automobile.

The story was viewed with some suspicion and a council of war had to be held by the sergeant, the lieutenant, the night superintendent and some of the sub-leaders of the attacking force. At its conclusion the officers were reluctantly forced to the conclusion that Mr. Schneider's offense had hardly been a capital crime and he was finally released, with

the solemn injunction to bring his automobiles up better, so that no similar thing should happen again.

The next man who disturbs the sleep of the down town force in a similar terrifying manner is likely to be deported, or banished to the mines for life. One or two more happenings of the kind might make the whole night force subjects for insomnia cures—hence the order that explosions in mufflers must not occur.

MEET FOR NASHVILLE

Nashville, Tenn., May 17—It begins to look as though Nashville were to have the honor of holding the first real automobile track meeting ever pulled off in Tennessee. Chattanooga and Memphis have had so-called meetings, but they amounted only to unsanctioned exhibitions of a couple of racing machines, while the proposed races in this city will not be open to racing cars and it is hoped that they will be held under the sanction of the A. A. A. A preliminary meeting has already been held and plans are well under way for a 2-days' meeting to be held on the Cumberland park track during the confederate reunion, which will be held June 14, 15 and 16. Sanction from the racing board has been applied for and there is every prospect that the affair will be a success. Probably thirty or forty cars from Nashville and surrounding towns will take part.

METROPOLITAN MOTOR BOATING

New York, May 16—Much interest is being taken in the coming Manhasset bay regatta, which is to be run on Decoration day by the American Power Boat Association. Smith & Mabley expect to have finished in time two boats—a 75 and a 150-horsepower Simplex.

C. H. Tangeman, of Hollander & Tangeman, will pilot a 30-horsepower boat. There is also being built for S. H. Vandergrift, of the N. Y. A. C., at the Seabury yard at Mott Haven, a 300-horsepower 66-foot flyer, which it is hoped will be completed in time for the races.

The engine for the Fiat motor boat, which is to race the Smith & Mabley Simplex, is expected by Hollander & Tangeman to arrive in this country this week.

RELAY MOTOR CYCLE RACE

L'Auto of Paris has arranged a relay motor cycle competition between Brest and Belford. The distance is a little over 630 miles and the event will be divided in relays of 100 kilometers, which, it is expected, will enable messages to be transmitted in comparatively short time. The event is considered of such importance that the army staff will very likely delegate a number of officers for observation purpose.

ANOTHER ORMOND RIVAL

Motorists of Charleston, S. C., have decided to make an effort to have the annual Ormond meeting transferred to the Isle of Palms. A delegation will be sent to meet the officers of the American Automobile Association and ask them to name a committee to inspect the beach, which they claim is one of the finest in the land. The beach is 9 miles long, 250 feet wide, and reported as hard and smooth as glass.

JOHNNY JOHNSON IN LINE

The old bicycle riders are rapidly going into the automobile business, in some connection. John S. Johnson is the latest to be swallowed up in the motor world. He has become a driver for the Minneapolis Winton agent.

AFFAIRS OF THE CLUBS



THE WOLVERHAMPTON AUTOMOBILE CLUB, OF ENGLAND, ON PARADE

Talk and Smoke—There is a meeting of the Chicago Automobile Club Thursday of this week. After the regular business is attended to there is an informal entertainment and smoker.

Bulawayoans in Line—Automobile Club of Rhodesia is the name given to the club recently formed by a dozen motorists of Bulawayo, South Africa. G. H. Laidman was elected president.

Missourians Want a Home—At a meeting of the Automobile Club of Kansas City, held in Kansas City, Mo., last week, it was decided to build a permanent club house. A constitution and by-laws were adopted but no officers were elected. The next meeting will take place June 9.

Ready to Hustle—A meeting of the newly elected board of governors of the New Jersey Automobile and Motor Club was held last Monday night at Newark, N. J., for the purpose of organizing and selecting committees. The following committees were appointed: Membership, William De Mars, Clarence Beach and J. H. Dawson; legal, Dr. H. C. Harris, R. C. Jenkinson and Horace P. Cooke; house, J. H. Dawson, F. N. Fiske, Charles W. Oathout, Dr. Clement Morris and Edward Zusi; auditing, James Close, F. W. T. Stiles and Ernest Boerger. The next meeting of the club will be held Monday evening, May 23, when it is expected that a speaker will address the members on some subject of interest to automobilists.

Honor the President—Last Saturday's club run by members of the Chicago Automobile Club of Chicago, was the most successful one of the three which have been held this season. The rendezvous was set for 2:30 in the afternoon and when the start was made about twenty cars were in line. President John Farson's home in Oak Park was the destination of the caravan and as an appropriate emblem for the occasion everyone in the party wore something red, from a bright red rose to a red necktie, not forgetting a few reddish socks. It is quite possible that if the weather had been a trifle warmer some of the ladies would also have had red parasols. On the route one could hear very plainly people make remarks about the "red devils." President Farson must have felt deeply touched at this outburst of red. Among the forty to fifty members in the party there were: Corporation Counsel and Mrs. Granville Browning, W. W. Tracy, John D. Bangs and Harry G. Foreman, respectively presidents of the boards of commissioners of the Lincoln, West and South Parks.

Syracuse Club Grows—Fifteen applications for membership will be acted upon by the Automobile Club of Syracuse, Syracuse, N. Y., at its meeting next week. The club now has a membership of seventy-seven and before the season really opens the officers say this number will be increased to a hundred, making the third largest in the state. President W. L. Brown has named the following committees: Membership—Forman Wilkinson, William S. Dunning and Theodore A. Young; exhibitions, contests, runs and tours—C. A. Benjamin, H. W. Smith and F. H. Elliott; laws and ordinances—Henry Walters, Wilbert L. Smith and Giles H. Stilwell; good roads—George S. Larrabee, Lyman C. Smith; entertainment—H. C. Pierce, Carl L. Amos and H. W. Chapin.

Race for \$1,100—The Indianapolis Automobile Club, of Indianapolis, Ind., is arranging a race meeting to be run at the fair grounds on Decoration day. The principal event will be a professional race for which it is claimed that a purse of \$1,100 has already been subscribed. The distance of this race will be 5 miles. The club's share in the prize is \$500 and as three entries have already been received at a fee of \$200 each, it is expected that this race alone will be worth while coming miles to see on account of the fight for the money. There will be other professional events in which the participation of Barney Oldfield, Tom Cooper and others is expected. There will also be five 5-mile races for amateurs and a challenge cup race.

Bridgeport on Parade—May 30, the Automobile Club of Bridgeport will show Bridgeport, Conn., how many automobiles it has. On that day there will be an opening of the season parade of the club members and their friends. The parade will start at 9:30 in the morning and at noon the party will assemble for dinner. Gasoline touring cars will lead the procession; then will come gasoline runabouts and then steamers. DeVer H. Warner will be grand marshal and A. K. L. Watson will conduct the steamer division. The Bridgeport club at its annual meeting last week elected the following officers: President, F. W. Bolande; vice-president, F. I. Hitchcock; secretary, Dr. Dow R. Beebe; treasurer, Frank T. Staples.

Parade and Races—May 30 has been selected by the Worcester Automobile Club, of Worcester, Mass., for the purpose of holding its first race meet and street parade. Merchandise prizes will be given to the winners of the different events.

Will Tour Europe—George H. Flinn, president of the Automobile Club of Pittsburg, Pa., has bought a 40-horsepower machine to be delivered in Europe. Mr. and Mrs. Flinn and Mr. and Mrs. F. H. Lloyd will sail in about 2 weeks for Hamburg and will tour to Hamburg, to the cup race. After the race the party will make an extensive tour of France.

Where Was Moses?—Fifteen members of the Aurora Automobile Club, Aurora, Ill., and two motor cyclists went on a run last week. It is reported that at a certain moment all the lights went out, and that as the roads were pitch dark the party did not dare drive further. Some of the motorists went to near-by farm houses and secured lanterns which enabled them to get back to town after a delay and at a 2-mile speed.

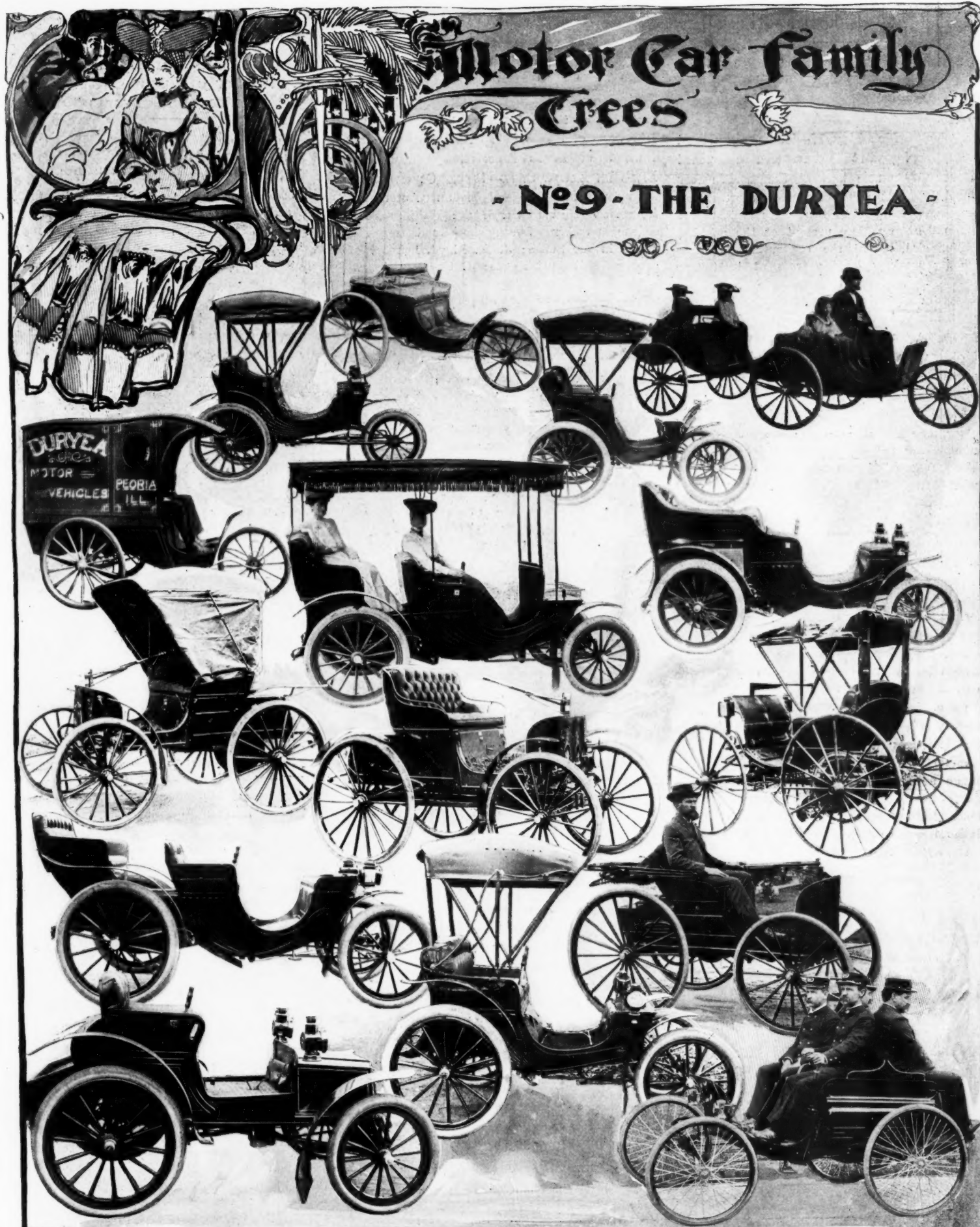
Lamb-like in Rockford—The first automobile parade arranged by the Rockford Automobile Club, Rockford, Ill., was held last week and was one of the grandest affairs ever witnessed in the Illinois town. Large crowds of citizens and many from nearby villages had gone to see the display. Twenty-three automobiles, of which nine were touring cars, took part in the crawl and demonstrated that motor cars are as tame as lambs.

Wolverines in Big Tour—At a meeting of the Grand Rapids Automobile Club, held last Monday in Grand Rapids, Mich., the following officers were elected: President, Dr. Perry Schurtz; vice-president, A. A. Barber; secretary, L. W. Welch; treasurer, N. Fred Avery; chairman of the touring committee, L. W. Welch. The board of directors is composed of the officers, Dr. Henry Hulst, C. A. Luce and Dr. E. H. Eddy. The club is planning to take part in the excursion to St. Louis and most of the members have expressed their willingness to join in the run.

Aldermen Convinced—Four members of the city council of Wichita, Kan., were taken out last week for a demonstration ride by the Automobile Club of Wichita. The members of this organization wanted to demonstrate to the aldermen that the recently adopted speed limit of 6 miles an hour was not only unreasonable but almost impracticable. After the drive all four members expressed their opinion that the law was wrong and promised to induce their fellow councilmen to change the ordinance. Two of the party said they thought the limit ought not to be less than 10 miles or more than 12. The chief of police, who was also a guest, said that 8 miles should be allowed in the business district and from 12 to 15 miles in the parks and outside the city limits.

Motor Car Family Trees

- No 9 - THE DURYEA -



Three-Wheeler—1903
Delivery Wagon—1899
Phaeton—1896
Surrey—1901
Phaeton—1904

Dos-a-dos—1900
Surrey—1903
Phaeton—1895
Phaeton—1902

Trap and Trailer—1898
Tonneau—1902
The First One—1892
Phaeton—1894
Dos-a-dos—1897

THE OLD STORY RETOLD

Speakers at International Good Roads Convention at St. Louis Proclaim the Great Necessity

St. Louis, Mo., May 17—The national and international good roads convention was opened yesterday in music hall at the world's fair grounds. About 200 delegates representing thirty-eight states, two territories and several foreign countries were present at the opening session, and before the convention is done with its work, delegates from at least five other European countries will have joined it.

Several interesting addresses were made, and the enthusiasm with which the speakers were greeted and the round of applaus which they received at the conclusion of their speeches indicated the sincere interest which those present were taking in this movement.

"The necessity for better roadways is apparent," said Governor A. M. Dockery of Missouri, in the course of his address. "The establishment of such a system is the missing link in the chain of our transportation facilities. By the aid of steam and electricity great lines of communication and interchange have been established, reaching out to every section of our country. The transportation problem, in so far as it relates to steam and electricity as motive powers, has been solved. The problem for this convention to consider is the means by which better highways may be constructed to enable the products of our industries to easily reach the great lines of transportation now in operation."

The president of the Merchants' Exchange of St. Louis, Henry H. Wernse, took for his subject "The Commercial Advantages of Good Roads." He said that the good roads movement ought to receive the support of the church and that preachers should take it as their subject when addressing their congregations or when giving lectures. The European highways, according to Mr. Wernse, are in an excellent condition and the governments of Europe favor any movement having for its object the improvement of the roads. In several countries they have been the means of attracting many tourists who would probably have never come or returned were it not for the fine road systems.

President W. H. Moore, of the National Good Roads Association, said he was glad to notice that the press of the country and the railroads were giving their support to the good roads movement. He suggested that there should be a state highway commission and that competent engineers should be employed for the improvement work. Furthermore, he said, convicts and vagrants ought to be put to work on the roads where they could render themselves much more useful than by being kept at work in jail.

Several prominent advocates of the road system were to speak yesterday, but owing to other conventions in session they will not be heard until later in the week. Among them are James Wilson, secretary of agriculture; President D. R. Francis, of the Louisiana Purchase exposition, and Mayor Wells of St. Louis.

The principal addresses scheduled for the remaining days of the convention are as follows:

Martin Dodge, director office public road inquiries—Educational and Experimental Work

of the Government Division; R. W. Richardson, secretary National Good Roads Association—Nation and State Agitation for Permanent Highways; Professor Ira O. Baker, University of Illinois—Road Improvements in the Mississippi Valley; Santiago Mendez, C. E., representative of the Mexican Government—The Highways of Mexico; T. G. Harper, president Iowa Good Roads Association—State Aid; Lewis M. Haupt, C. E.—Proper Construction; Augustus Post—Overland in an Automobile from New York to St. Louis; William Richardson, member of congress—Road Improvements in the South; J. M. Lloyd, member of congress—Missouri Roads; J. C. Clair, industrial commissioner Illinois Central railroad—Improved Roads in the Industrial Department; M. V. Richards, land and industrial commissioner Southern railway—The Influence and Value of Good Road Trains; A. Bermudez, special commissioner from Nicaragua to the world's fair—Road Necessity of My Country; H. G. Myers, Arkansas—The Traveler and the Roads; S. Eugene de Rackin, Manila—Roads in our Insular Possessions; Frederick B. Parker, New York—The Use of Tar in Road Making; Ira W. Sylvester—What Can be Done.

SUIT OVER TRADE DEAL

Syracuse, N. Y., May 17—An action has been brought in the municipal court by Paul Norwood against the R. M. Cornwell Co., dealer in automobiles, in which breach of contract is alleged by the plaintiff. The answer has not been filed but the complainant alleges that on April 21 he entered into a contract with the defendant, whereby he was to exchange his 1902 Oldsmobile and \$100 in cash for a two-cylinder Pope-Toledo, 1903 pattern. Mr. Norwood says he paid the money and shipped his Olds to Syracuse, but frequent demands for his Pope-Toledo have brought forth no fruit. He demands judgment in the sum of \$800.

Dealers in automobiles here have done a thriving business thus far this year, no fewer than thirty new cars having been purchased and there are as many more orders unfilled. It is predicted that 200 cars will be owned here by fall.

The Syracuse Automobile Co. has established a charging plant for electrics. The company is selling motor boats and Buckmobiles. Manager Delong has a number of the latter in his show rooms and has found customers for a number of 15-horsepower machines.

The firm of Moore & Richards has been organized and has begun the manufacture of marine engines at 309 West Willow street. The engines are of a new design perfected by Mr. Moore, who is a machinist of long experience.

TRADE ON THE COAST

San Francisco, Cal., May 10—The West Coast Motor Car Co. has moved to its new quarters at 606 Van Ness avenue. When entirely completed the new store will be one of the finest in the city. This concern has the agency for the entire Pacific Coast for the Autocar and Columbia.

Fred A. Jacobs of the Rambler Automobile agency returned yesterday from his eastern trip. He visited the Rambler factory and tried to secure more cars than the number he had originally ordered, but the people in Kenosha were not able to satisfy his request, much to their own sorrow.

PLAN ACTIVE CAMPAIGN

Minneapolis Dealers Arranging for A Number of Business-Getting Automobile Events

Minneapolis, Minn., May 16—The activities of the Minneapolis Automobile Dealers' Association, which was organized early in February, will become evident next week, when the first of a series of summer events will occur. Saturday evening, May 28, an automobile parade, which is expected to be the greatest thing of its kind ever attempted here, will open the automobile season in Minneapolis.

The parade will be the result of the united efforts of the dealers' association and the Minneapolis Automobile Club. The latter organization, however, will simply be asked to co-operate with the dealers. The club has been anything but an active organization since its beginning. An attempt at a meeting at the Commercial Club last week resulted in no quorum.

In addition to the hundred or so of private cars which will be in line, near a hundred cars will be furnished by the dealers. Every dealer will turn out everything on wheels that he has in his establishment, and several of them expect to have fully twenty cars in line. A. F. Chase, W. H. Wheeler and Willis Walker are the committee having charge of the arrangements.

No attempt will be made toward having flower decorations or other fancy arrangements. The procession will be simply to show cars, and the interest which the entire city has shown in the automobile this year is evidence that it will be a greater drawing card than a circus parade.

Following the parade, regular events will be instituted, to be held every 2 weeks. The next event will undoubtedly be a hill-climbing contest, probably on Kenwood hill, where the successful contest was held last year. The climbing contest last summer was one of the best features of the year. It was considered of much more practical value than any of the races or other show events that were held. This year the great number of new high power machines in the city will add considerable interest to a climbing contest.

The demonstrating cars have been running out Kenwood boulevard and over the hill during the past few days under very adverse circumstances. Regular cloudbursts of rain have made the soft roads worse, and dealers have considered it a severe test of a machine to run it out through this part of the park system. Not a day has been missed by the demonstrators, however, as enough cars cannot be brought to Minneapolis to take care of the prospective purchasers who want "to be shown."

Other big events are being scheduled by the automobile men, although plans for them are still unsettled. Club runs will undoubtedly be held frequently, at least one a month, and the co-operation of the automobile club is expected to make these a success. At present nothing definite has been determined upon, but it is intimated that original features will be introduced to make the events especially interesting.

A big race meet is assured. Plans for this have been broached at several recent meetings of the dealers, but they have decided not to do anything for several weeks, or until the rush for cars slacks up enough to give them time to think. The meet this year will be on

a different basis from others held here. It will be run as a regular race meet, and one or two of the big guns of the racing world, with some of the machines which they have made famous, will be imported for the occasion. The meet will probably not be held until late in the season.

Dr. C. De Garmo Gray, who is something of a promoter in the way of shows and meets, did not meet with the warmest kind of a reception in Minneapolis. He spoke before the dealers' association, at the meeting last week, but the dealers did not grow enthusiastic over his plans for an outdoor show. The Minneapolis dealers expressed themselves as confident that they could manage their own exhibition if they wished to give one. It is possible that a regular outdoor show will be held at some time during the summer.

FACTORY FOR NASHVILLE

Nashville, Tenn., May 17—Negotiations are now pending which may result in the building of a large automobile factory in Nashville. Northern capitalists have been in communication with the local chamber of commerce and with owners of desirable sites with a view of receiving land on which to build their factory. It is hoped that they will decide on this city as the location for their plant. It is said

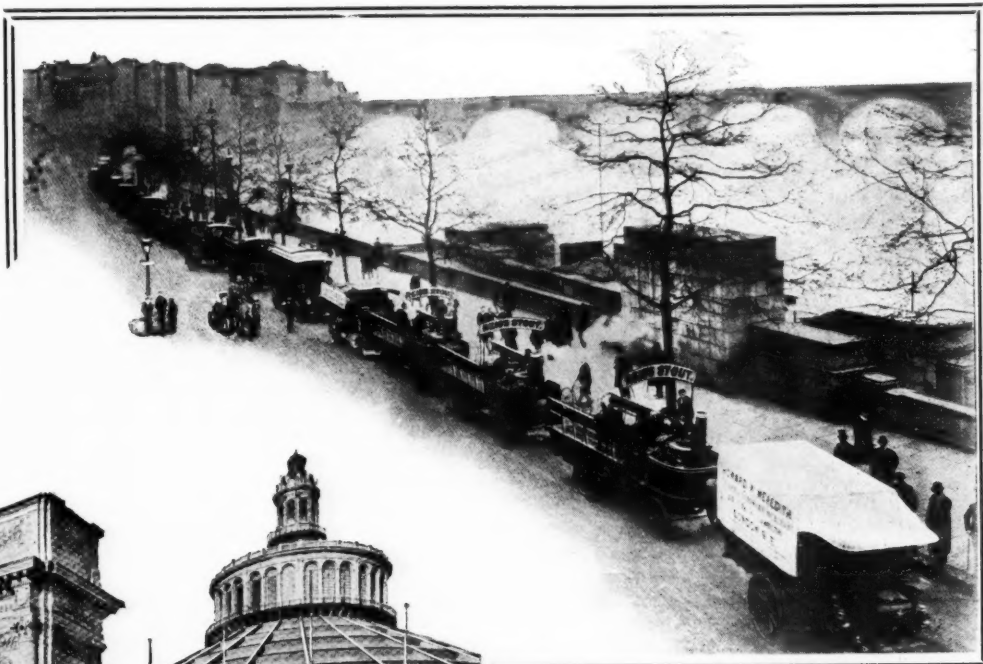
BIG AUSTRIAN EXHIBIT

All Well-Known Continental Concerns Make Splendid Displays of Automobiles and Parts

Vienna, Austria, May 3—The fourth annual Austrian international automobile and alcohol exhibition was dedicated during the latter part of April by Archduke Franz Ferdinand, and delegates from all the countries which take part in the exhibition were present. The great halls of the Prater, where the show is held,

many large and small countries there are delegations from the German and French army, from German and French ministers and automobile clubs and many scientists interested in matters relating to alcohol.

The following is a partial list of the principal exhibiting concerns: France—Panhard & Levassor, Mors, A. Darraq & Co., Caboché, Renault, de Dion-Bouton, Decauville, Gardner-Serpollet, Charron-Girardot-Voigt, Brouhot, Peugeot, Clement, Gobron-Brillie, Krieger, Longuemare, Tony Huber. Germany—Benz, Stoeber Neue Automobile Gesellschaft, Maurer-Union, Durkopp & Co., Adler & Co., Berliner



PARADE OF COMMERCIAL VEHICLES IN LONDON

Motorwagenfabrik-Tempelhof, Scheibler Automobil-Industrie. Austria—Jacob Lohner & Co., Arnold Spitz & Co., Bierenz & Co., August Braun & Co., Bock & Hollender, Oesterreichische Daimler Motoren Gesellschaft, Johann Puch, Laurin-Clement, Nesseldorfer Wagenbaufabrikgesellschaft. Italy is well represented by the Fiat company, which has one of the most extensive and interesting displays. Besides these there are a great many exhibitors of appurtenances.

COMPLAIN OF FREIGHT DELAYS

Washington, D. C., May 14—These are the days that bring joy to the hearts of the automobile fraternity in Washington. Weather conditions so far this month have been ideal and as a result the various salesrooms have been invaded by prospective customers. All along the line the report is that orders are coming in with a degree of regularity that is most encouraging.

There is a general complaint by the automobile dealers against the abnormal delay in freight shipments to this city. According to the dealers automobiles coming as freight from all directions are seriously delayed. Machines that in the ordinary course of travel should arrive in Washington within a week or ten days after being loaded on the cars at the point of shipment do not arrive here until 2 or 3 and even sometimes 4 weeks later. Supply houses are also having this same trouble, as indeed are business men in many other lines of trade. Railroad officials claim that the work incident to the construction of the new terminal facilities is responsible part for the delay.



WHERE THE VIENNA SHOW WAS HELD

that the company behind the enterprise has a capital stock of \$250,000.

Local dealers are still hampered in their efforts to do business by the fact that they have been unable to secure any machines to sell. The only 1904 machines which have been received are a car load of Ramblers and one Orient buckboard, all of which have been sold.

John W. Chester has a car load of Olds on the road, all of which have been sold. Duncan Dorris has been promised a shipment of St. Louis cars on June 15, one of which he has sold, and a shipment of Orient, of which he has also sold one. The Nashville Auto Co., which handles the Cadillacs, has the promise of a shipment before the end of this month and several of the machines which will come at that time have been sold. The Southern Electric Co. is waiting patiently for more Ramblers and the Southern Automobile Co., which handles the White exclusively, has already sold one car more than it has in stock.

The Cumberland Telephone Co. is going to make its second experiment in the use of automobiles as emergency wagons and has put in an order for two Orient buckboards to carry the repairmen about the city and surrounding country.

were found too small this year to contain all the exhibits and some are shown in the garden under a tent especially put up for the purpose.

Continental papers, those of Paris especially, claim that it is the greatest show ever held on the continent, excepting the annual salon. As a matter of fact, while there are not so many exhibitors as at Paris and London, all of the important French, German, Austrian and Belgian manufacturers have displayed their goods. For the first time in the history of the automobile trade the German, and especially the Austrian makers, have come in full force and their showing is a revelation.

The principal reason of the success of this show lays in the fact that it received ample government support and that in the foreign countries which are represented the government also gave large bonuses to make the national display a worthy one. It is expected that after the many competitions and tests have been ended the reports of the expert commission will be highly interesting and instructive.

Besides the leading manufacturers from

THE READERS' CLEARING HOUSE

HIGH AND LOW COMPRESSION

Hartford, Conn.—Editor MOTOR AGE—Why are two cam shafts required for low compression motors, while but one is used on high compression motors? What are the advantages and disadvantages, respectively, of high and low compression motors? Which is better for a motor cycle engine, a long or a short inlet pipe from the carbureter, and why? Which is the better, a double chain or a bevel gear and propeller shaft drive? What percentage of the power of the motor is delivered to the wheel of a belt driven motor bicycle and what percentage in a chain driven one? How is the speed gearing of a chain driven motor bicycle determined? How is that of a belt driven machine determined? Could a motor bicycle be driven successfully by a bevel gear system? Is an enclosed or an outside fly wheel better on a motor bicycle? What is the best disposition of the motor? Is a long belt better than a short belt in a belt driven motor cycle?—J. J. O'CONNOR.

High or low compression does not regulate the number of cam shafts. When mechanically operated inlets are used, it usually requires two cam shafts, although a few designers operate both valves from the same cam, using a direct push on one valve and operating through a bell-crank to the other. If the valves are both on the same side of the cylinder the cams are keyed to the same shaft. Where the inlet valve is on one side of the cylinder and the exhaust on the other, it is necessary to have a cam shaft for each valve. The low compression motor is more easily cooled, can be run at a lower speed and produces less power per volume than one of high compression. The high compression motor is subject to more severe strains. The disadvantages of each are numerous when the design for the particular duty has not been considered. Properly designed they have no inherent faults, and the selection of either depends upon its adaptability. Short inlet pipes are better. The cylinder is a pump on the suction stroke and draws from the carbureter opening. The tendency of that body of air is to remain at rest. When motion is produced there is friction against the pipe. The vacuum produced by a pump depends upon the ratio between the piston displacement and the total volume of the chamber where the stroke is complete; which, for a maximum, would have to be unity. Assume a 4 by 4-inch motor with a 1½-inch inlet pipe 30 feet long and a carbureter at the end. If carburation were perfect and the gas did not condense, the motor would operate at low speeds, but at high speeds the vacuum, being so slight on account of the large volume in the pipe, would not be sufficient to move the body of gas due to the resistance of its own inertia and the friction against the walls. There are arguments for and against both double chain and bevel gear drives. There will be no appreciable difference in the efficiency of a chain, or a belt driven motor bicycle under favorable conditions. Let N equal the speed of the motor in revolutions

per minute; V the speed of the rear wheel in revolutions per minute; L the diameter of motor pulley or teeth in the sprockets; and M the diameter of the rear pulley or teeth in the sprocket, then

$$X = \frac{N \times L}{M}$$

Then X multiplied by the circumference of the rear wheel in feet will give the number of feet traversed by the rear wheel in 1 minute. This multiplied by sixty and divided by 5280 will give the speed in miles per hour corresponding to a speed N of the motor. A bevel gear motor bicycle is manufactured and is a success. The construction is expensive, however. The inside fly wheel is desirable. The disposition of the motor can best be discussed by the various manufacturers who claim advantages for their particular designs. No standard has been set and many different dispositions have proven practical. A long belt is preferable to a short one.

ALUMINUM SHRINKAGE

Providence, R. I.—Editor MOTOR AGE—In a recent issue MOTOR AGE stated that ⅛-inch per foot should be allowed for shrinkage in aluminum castings. Kent gives the shrinkage as 3-16-inch per foot and I have seen it given by others as high as 17-64-inch per foot. Which is correct?—SANFORD A. POTTER.

It is safe to allow ⅛-inch per foot for shrinkage of aluminum. This will vary with the amount of zinc or other alloy, the temperature at which the metal is poured, the size of the casting, the temperature at which it is removed from the flask, and whether the sand is green or baked. No rule can be given for the shrinkage, but it will be found that ⅛ to 9-64-inch will be generally correct.

MOTOR DISPOSITION

Allegheny, Pa.—Editor MOTOR AGE—What is the best way to place a single-cylinder motor with clutch and speed changing gears, all to be close to the rear axle?—G. F. DILLIG.

In designing the car do not attempt to place the motor and transmission too close to the rear axle. If using a chain drive it will be found that the short chain will give trouble, and if a bevel gear drive is used the angularity of the shaft will be excessive. If the correspondent will state whether the motor is vertical or horizontal, and the type of drive it is intended to adopt, MOTOR AGE will be pleased to reply to the question.

MOTOR HORSEPOWER

Winfield, Kan.—Editor MOTOR AGE—Will you kindly tell me what power a four-cylinder motor of 3½-inch bore and 4½-inch stroke will develop?—J. S. SEIMEARS.

If the motor is properly constructed it should develop 14 horsepower at 1,000 revolutions per minute.

Selby, S. Dak.—Editor MOTOR AGE—What horsepower should a four-cylinder motor of 2½-inch bore and stroke develop at 1,400 revolutions? Would a fly wheel 14 inches in diameter and of 30 pounds rim weight be sufficient for this motor? By placing the motor crosswise of

the car frame and in front would a fan be needed to cool it?—W. S. HARRISOUGH.

The motor will develop 6¼ horsepower at that speed. The fly wheel is in good proportion. With proper radiating surface on the motor cylinder a fan is not essential, but is advisable if the machine is to be left standing any great length of time with engine running or to do hard pulling at a slow speed.

Detroit, Mich.—Editor MOTOR AGE—What power should be developed by a four-cylinder motor of 4¼-inch bore and stroke running respectively at 900 and 1,000 revolutions per minute? Also what would a motor of 4¼-inch bore and 4½-inch stroke develop at the same speeds?—E. S. GEORGE.

A four-cylinder motor 4¼ by 4½ inches will develop 22-horsepower at 900 revolutions per minute, and 24-horsepower at 1,000 revolutions. The 4¼ by 4½-inch motor will develop 19-horsepower at 900 revolutions per minute and 21-horsepower at 1,000 revolutions.

FOUR-CYLINDER IGNITION

St. Paul, Minn.—Editor MOTOR AGE—Is it impossible to operate a four-cylinder motor with one spark coil? If this can be done successfully what is the system?—J. D. R.

It is quite practicable to operate four cylinders with one spark coil. This is done by interrupting the primary circuit as many times per revolution of the cam shaft as there are cylinders, and placing the interruptions 90 degrees apart. In a later issue a system for multiple-cylinder, single-coil ignition will be illustrated and described.

HEAT RADIATION

Detroit, Mich.—What is the formula for computing the volume of free air necessary per minute to keep a given radiating surface at a given temperature, when the number of heat units to be carried off per minute is known?—E. C. RICHARD.

The formula is:

$$\frac{e}{(T-T')(.0686)} 13 = \text{cubic feet of air per minute.}$$

Where e is the British thermal units to be carried away per minute; T , the temperature of the radiating body; T' , the temperature of free air; 13, the cubic feet per pound of air at 60 degrees Fahrenheit; .0686, the British thermal units necessary to raise the temperature of 1 pound of air 1 degree Fahrenheit at 32 degrees Fahrenheit.

This formula will probably be close enough for the desired circulation, although it is only approximate.

MOTOR COMPRESSION

Lowell, Mass.—Editor MOTOR AGE—In conversation with salesmen of several different machines I secured the information that the gauge pressure of compression of two different motors was 120 pounds while that of a third was but 50 pounds. How high can this compression be carried without causing premature ignition? What is the ratio between gauge pressure and ignition pressure? Supposing that in a motor the gauge pressure of compression were 75 pounds; what would be the pressure after ignition?—THOMAS McNAMARA.

The maximum compression, considering pre-ignition as the limit, is variable, depending upon the efficiency of the cooling system, the presence of sharp corners or projections in the combustion chamber, and the speed of the motor. High compression cannot be used on low speed motors unless the fuel is injected into the cylinder when compression is com-

plete. With a compression of 75 gauge pounds, the ignition pressure will be about 293 pounds gauge. **MOTOR AGE** will publish a diagram to determine the relation between compression and ignition pressure in its next issue.

EXPLOSIVE MIXTURE

Pittsburg, Pa.—Editor **MOTOR AGE**—Is there a formula for determining the correct proportions of air and gasoline to form a proper explosive mixture for gasoline motors? If so will you kindly publish it?—G. W. BOSTWICK.

Experiment has determined that one part of gasoline to 8,000 parts of air forms the most advantageous mixture. With the proportion of air 1,000 parts either way the mixture will not lose perceptibly in effectiveness.

STRENGTH OF VESSELS

New London, Conn.—Editor **MOTOR AGE**—Will a spherical vessel 1 foot in diameter stand as much pressure per square inch as one 2 feet in diameter made of the same material and of the same weight of wall?—B. S. C.

The thickness T of a sphere to withstand a pressure P , allowing a safe stress S , and having a diameter D , in inches, is

$$T = \frac{P \times D}{4S}$$

Hence the 2-foot sphere should have the shell two times as thick as the other.

COMPOUND STEAM ENGINES

Traverse City, Mich.—Editor **MOTOR AGE**—Is there a reliable concern which makes for automobiles a compound steam engine which may be changed to a simple engine instantly when such occasion as hard pulls makes such a change desirable?—D. W. STEWART.

The compounding of steam engines for automobile use has not shown sufficient economy to warrant its general adoption for small power. Some of the advertisers in the **MOTOR AGE** may be able to supply an engine of this kind.

COMPOUND MOTOR

Cleveland, O.—Editor **MOTOR AGE**—In a three-cylinder compound internal combustion motor in which the two outer cylinders are high pressure and the middle one a low pressure cylinder taking the exhaust of both of the others, would not the pressure on the high and low pressure cylinder pistons equalize, the back pressure on the ascending high-pressure cylinder piston being equal to the downward pressure on the piston in the low pressure cylinders?—W. J. ROSEBORO.

A motor constructed along these lines was exhibited recently, and has been described in **MOTOR AGE**. The manufacturers will probably be pleased to go into detail on the theory that evolved their design.

HOT AFTER THE F. A. M.

St. Louis, Mo.—Editor **MOTOR AGE**—I have noticed the published resolutions of the Federation of American Motorcyclists seeking to establish a 110-pound weight limit for motor bicycle competitions and am really surprised. I believe motor cyclists who are fair minded, and especially the manufacturers of the Hercules, Thomas, Mitchell, Orient and several other machines, should make a vigorous protest against the 110-pound limit. If the builders of light machines or their riders are afraid to compete against the larger ones, they should stay out. It would be a better plan by far to make a class for 100-pound machines, one for 150-pound machines and one for the big freaks.

The majority of machines in America which have established reputations exceed 110 pounds in weight. There is only one prominent machine in America today eligible to a race under the 110-pound limit, and that is the Thor or any of the machines on the American market using Thor parts and Thor engines, such as the Indian, Warwick, Reading and dozens of others. We might just as well say we will recognize no record unless made with the Aurora Automatic Machinery Co.'s motor cycle.

The resolutions also state that such a limit would put us on the same basis as Great Britain and France. I desire to protest this statement. It would not put us on the same basis, and we never can get on the same basis, because American machines are made for American people to ride on American roads, and the ordinary 110-pound machine is considered by thousands of riders to be impracticable for American roads, notwithstanding the fact that there are a great many riders who swear by the light machines.

The money and the business in motor cycles is not from racing freaks or racing men; it is from the man who buys for road work, and if we limit competition to 110-pound machines any man owning an ordinary moderate weight motor cycle such as the Orient or Mitchell is barred from competing. He cannot afford to buy one machine for the road and one machine for racing. It is an injustice to American manufacturers and to the American public to insist on a 110-pound weight limit for motor bicycles.

I am well aware there are several machines made in this country of less than 110 pounds, but they can never hope to compete with the Thor outfit, and it appears to me as if the F. A. M., of which I am a member as well as being on the competition committee, is trying to hand bouquets to some few manufacturers. The talk about encouraging a reduction of weight among manufacturers is all nonsense. The manufacturer has enough encouragement from the fact that he needs the money.—HARRY R. GEER.

Hampstead, N. H.—Editor **MOTOR AGE**—I would like to inquire through the columns of **MOTOR AGE** if all motor cyclists in this country agree with the American Federation of Motorcyclists in its resolutions in regard to American motor cycle records.

If 110 pounds is to be the limit in weight for speed and endurance tests on the road, I think there are some experienced riders who would rather be excused.

If motor cycles that exceed 110 pounds in weight are to become unpopular it is surely up to certain manufacturers to make radical changes in the design and construction of their machines. As motor cyclists we do not like to be using machines that are in the future to be looked upon as "abnormal in power and construction and as such are unfit for practical usage." There are several manufacturers of motor cycles who are using a very popular motor that is rated at $1\frac{1}{4}$ horsepower, as is known by many. Some of these machines weigh very nearly 125 pounds. There are other machines that weigh from 125 to 150 pounds that have proved to be practical for both business and pleasure.

Some have learned by experience that a certain amount of weight is necessary for comfort and safety. Plenty of power, too, is a nice thing to have, but it evidently has never occurred to some of us that the weight and power

in the machines that we liked was abnormal. Why should any regularly built motor cycle that has sufficient weight for comfort and safety, and power enough for all requirements, be considered "abnormal in power and construction and unfit for practical usage"?

I fail to see how such a rule or resolution can have a desirable influence on motor cycle design, construction and competition. A rule or resolution that will not admit to open competition any regularly built motor cycle of reasonable weight and power is unreasonable and unfair.

I do not see how we can be eligible to membership in the F. A. M. if we continue to use these "abnormal" machines. If I am wrong in my views in regard to this matter I would be pleased to hear from those who are better informed.—E. B. WOODARD.

GOOD FIELD IN AUSTRALIA

Information has come to the government at Washington to the effect that the great want of the Australian commonwealth is some cheap kind of oil motor for farm work and for the conveyance of supplies. In the back districts, where timber is scarce and coal an expensive luxury, oil engines, both fixed and portable, are rapidly coming into general use, and are preparing the way for the oil motor. It is a mistake to assume that Australian roads generally are unsuitable for motor traffic. It is only in places that they are so. When the bicycle was introduced into Australia the same objection was urged, but at present there are thousands of bicycles in every-day use in that country. Cheap motor cars, for goods or passengers, must be in enormous demand throughout the commonwealth, but at present the prices are prohibitive. Those in use are almost exclusively of French or American make. At country railway stations, which are frequently situated at a considerable distance from the townships, motor omnibuses would prove a boon.

RECENT INCORPORATIONS

Cleveland, O.—The Euclid Avenue Automobile Co., capital \$25,000. Incorporators Wade McIlrath, E. V. Hopkins, Clyde Martin, J. W. Orndorf and Henry Orndorf.

Dayton, O.—The Dayton Rubber Co., capital stock \$25,000. To manufacture pneumatic puncture-proof and solid tires and rubber goods. Officers: O. F. Davidson, president; N. N. Ramsey, vice-president; W. S. Ruffman, secretary and sales manager; C. C. Hoover, treasurer; A. T. Halt, superintendent.

New York—Automobile Transportation Co., capital \$5,000. Directors E. G. Milne, Thomas Sinnott and Robert Blake.

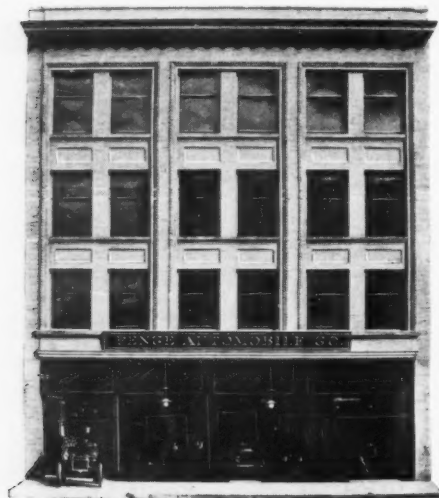
Orange, N. J.—The Lansden Co., capital \$30,000. To manufacture and deal in automobiles and carriages. Incorporators David S. Lansden, John M. Lansden and James Cowden Meyers.

Pittsburg, Pa.—Iron City Vehicle Co., capital \$10,000. To manufacture, sell, buy and repair carriages, wagons and automobiles. Directors John A. Hawkins, George A. Urling, Harry W. Urling and Robert Y. McKinnon.

Columbia, C. S.—The Orangeburg Automobile Co., capital \$1,500. Officers: W. C. Wolfe, president; H. C. Wannamaker, vice-president; W. D. Berry, secretary and treasurer.

New York—Automobile Transportation Co., capital, \$5,000. Incorporators and directors for the first year: E. G. Milne, N. Y.; Thomas Sinnott and Robert Blake.

GOSSIP OF THE GARAGES



PENCE GARAGE AT MINNEAPOLIS

Peerless in Bunches—The Banker Bros. Co. received two car loads of Peerless vehicles this week at its New York garage.

Knox Hat Delivery—A prominent New York hatter is negotiating with the Knox Automobile Co. for an outfit of delivery wagons.

Royalty in New York—The Duerr-Ward Co., of New York, though it received the first of the Royal tourists early last week, has taken orders for seven of them.

New York to St. Louis—The Clement-Bayard car fitted with Continental tires, which is making a run from New York to St. Louis in the interests of the Bowman Automobile Co. and the Continental Cautehouse Co., of New York, has reached Buffalo.

Mercedes on Hand—The first two of the 18-28-horsepower 1904 Mercedes secured by Smith & Mabley, of New York, have arrived and were on view at their garage last week. Others will follow in regular weekly shipments, enabling orders to be filled within 10 days.

Oldsmobiles Wanted—The Auto Storage & Repair Co., of Buffalo, N. Y., has opened a garage and repair shop in which a specialty will be made of caring for Oldsmobiles. The company also wishes to secure the agency for a car. C. E. Shaw is manager and Charles F. Benzinz is secretary and treasurer.

Husky Italian Immigrants—An Italian steamer due Wednesday had on board consigned to Hollander & Tangeman, of New York, a 60-horsepower Fiat of international cup race type and also several chassis. The engine for the boat which is matched against the Smith & Mabley Simplex was also on board.

Fine Northwest Garage—The finest automobile building in the northwest, and probably one of the finest in the United States, was opened in Minneapolis, Minn., last week by the Pence Automobile Co. The building occupies three ordinary fronts, is four stories high, built of brick, and equipped with every possible convenience for the conduct of the automobile business. The ground floor of the building is 130 by 50 feet. The show room and offices, which are in the front of the ground floor, occupy 50 feet of the depth, while the balance

of that floor is devoted to the garage. The second floor holds the machine shop, one of the most completely equipped west of Chicago. The entire third and fourth floors are given up to storage. The entrance facilities are especially good. In front is one main entrance, which leads back into the garage. From "Automobile alley," the rear, there are three entrances, two on the main floor and one onto the great electric elevator, which has a capacity of 6 tons. Wash racks are found on the main floor and in the large basement, and also in the rear of the building. The structure is steam-heated, and was erected at a cost of \$75,000. The Pence company has added the Clinton marine engine line and the Foss stationary engine to its equipment.

Speed Sold the Car—As a result of an impressive little burst of speed it showed on a recent Sunday run of the Long Island Automobile Club, L. R. Adams, its former president, gave forthwith an order to Manager Hopkins, of the Brooklyn Automobile Co., of Brooklyn, N. Y., for a two-cylinder 14-horsepower Haynes-Apperson two passenger car. With two in the vehicle besides himself Mr. Adams drove it over a 9-mile stretch near Freeport in 12 minutes—a 45-mile-an-hour rate. There are fourteen cars in the Kokomo factory receiving special fittings for Brooklyn and New York buyers.

All Builders' Fault—Unavoidable delays on the part of the builders have compelled the National Capital Automobile Co. from opening its new garage on Fourteenth street, Washington, D. C. Manager Wood has been given positive assurance that the building will be ready for occupancy by the middle of next week. Business is still up to the top notch with this company and orders are piling in so heavily that Manager Wood despairs of ever getting enough machines from the various factories represented to fill them. The first Oldsmobile

touring car reached Washington this week and was immediately sold.

Enters Manhattan—The Daimler Mfg. Co. of Steinway, L. I., has established a retail garage at 10 West Sixtieth street, New York.

Moved Few Doors—The Buffalo Motor Car Co., Buffalo, N. Y., agent for the Columbia, has moved from 918 Main street to 893 Main street.

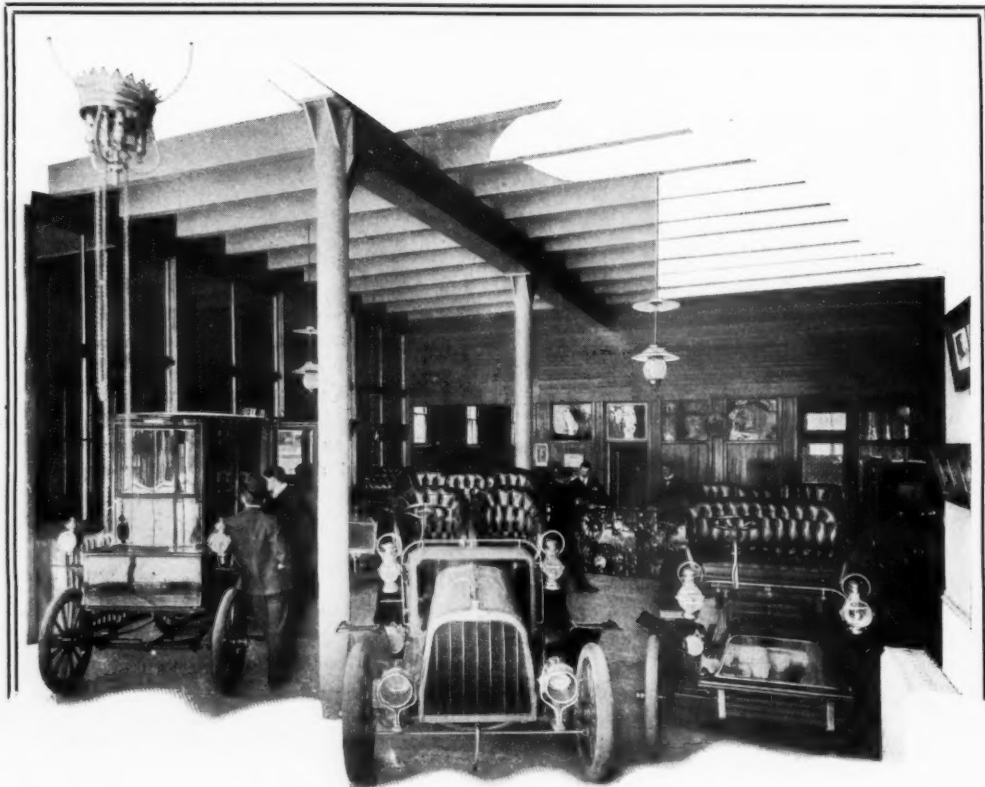
Air-Coolers Make Hit—M. A. Cornell & Co., the New York agents of the United Motor Corporation, of Pawtucket, R. I., are kept busy giving demonstrations of the Cameron cars, which are making an encouraging debut in the metropolis.

Orders in Relays—The first shipment of Relay cars has just been received by A. L. Kull & Co., who were recently appointed Washington, D. C., agents. They are attracting much attention and Mr. Kull has already booked several orders for them for immediate delivery.

Hartfords Take—Royce Hough, the new manager of the Washington, D. C., branch of the Pope Mfg. Co., is achieving great results with the different Pope cars. The Pope-Hartford has taken Washington, and Manager Hough finds it a difficult matter to keep one on the floor even for exhibition purposes.

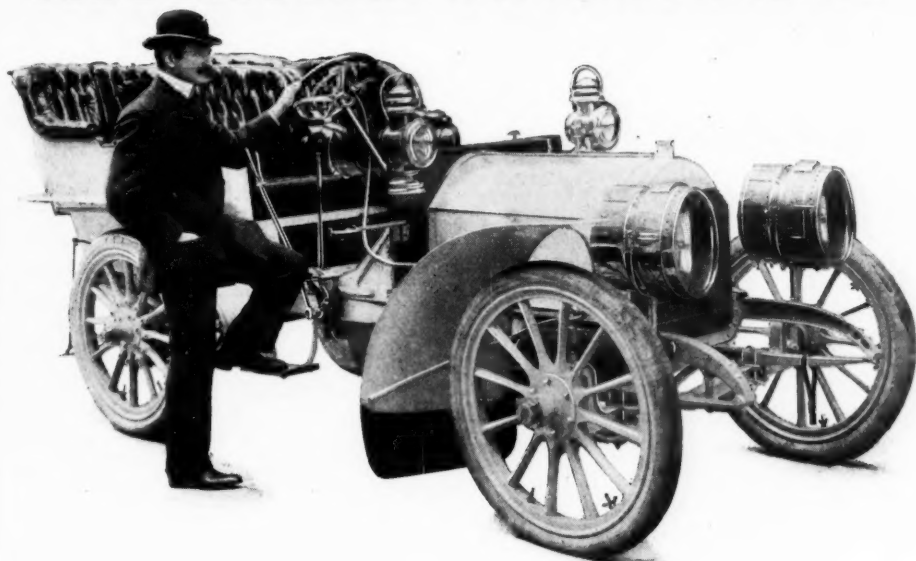
Jay in Minneapolis—The White car is gaining a strong footing in Minneapolis, Minn., this year. The agency of the Haynes Auto Co. has become important enough to receive frequent visits from Webb Jay, and many buyers have enjoyed runs with him at the wheel, which gave them a glimpse of the work he did in the endurance run.

Going It Alone—George Andrews has succeeded the Hayes Automobile Co., at 437 Pearl street, Buffalo, N. Y. He was the manager of the old concern and will continue the business in his name on the same lines. Mr. Hayes, who controlled the local agencies for the locomobile, will keep the agency, but on account of his being absent from the city so much he will leave that end of his business in the hands of Mr. Andrews.



SALESROOM OF THE PENCE GARAGE AT MINNEAPOLIS

AUTOMOBILE DEVELOPMENT



THE FIAT ITALIAN CAR

THE FIAT, OF ITALY

The Fiat is the Italian Mercedes, introduced to this country as the F. I. A. T. by Hollander & Tangeman, of New York, and since through familiarity come to be known as Fiat, a more convenient blending of the initials of its manufacturers, the Fabbrica Italiana di Automobili Torino.

The main frame of the Fiat car is constructed of pressed steel. It has no under frame, either for the engine or gear box. Opposite the engine it is "strangled" or narrowed, in order to give an increased angle to the steering wheels. There are two lengths for each type; for the 16-20-horsepower model one 7 feet 7 inches long and one 9 feet 6 inches long; for the 24-30 horsepower model one 8 feet 10 inches long and one 9 feet 9 inches long. The latter length of each is especially made to allow a side entrance body to be fitted.

The semi-elliptic side springs are made very long, the side-spring horns in front forming a part of the pressed-steel frame.

All the Fiat cars have four vertical cylinders, which are cast in pairs and fitted with mechanically-operated inlet and exhaust valves. The 24-30-horsepower motor has cylinders of 130 millimeter bore by 130 millimeter stroke, while the 16-20-horsepower motor is 110 by 110 millimeters. The dimensions approximate 5½ and 4¾ inches, respectively.

The Sims-Bosch magneto electric ignition is fitted on the right side of the motor, driven by noiseless red-fiber gear wheels, all batteries, coils, tremblers, etc., being dispensed with.

A genuine Daimler honeycomb radiator is fitted on each car. It holds about 1½ gallons of water. This is circulated around the cylinders by means of a centrifugal pump, driven by fiber gears from the half-time valve cam shaft. To cool the water the clutch is fitted with fan blades around its outer periphery, which in revolving draw the air through the hood and radiator.

The clutch is of the expanding type, such as used on the Mercedes car. It is fitted into the drum in the center of the fly wheel, and consists of a flat spiral spring about 7 inches in diameter, one end of which is made fast to a boss on the fly wheel, while the other end is free. A bell crank lever is attached with a small roller at the end, which is engaged by a cam sliding

on the main shaft. The lever is moved by the roller running up the cam, which motion tends to tighten one end of the clutch spring, which grips a hollow cylinder mounted on the main shaft.

The gear of the 1904 Fiat has been entirely remodeled, and the second motion shaft now lies at the left of the first motion shaft. The gear box has a very large inspection cover, and its sliding members are mounted on two independent sleeves. The reverse intermediate gear is carried by a rocking arm. The speed change lever moves forward and backward in either of two alternate slots for the four forward speeds, and has a safety catch which, when withdrawn, allows it to pass to the third slot for the reverse speed. The gear, counter shafts and axles are all fitted with ball bearings. The final drive is by two roller chains.

Two brakes are fitted, and are actuated by the usual pedal and lever. They are both metal to metal, and powerful. The side brakes are of

the internal expanding style, and are compensated by springs. The foot brake is connected with the clutch in such a way that this is withdrawn when the hand lever brake is applied.

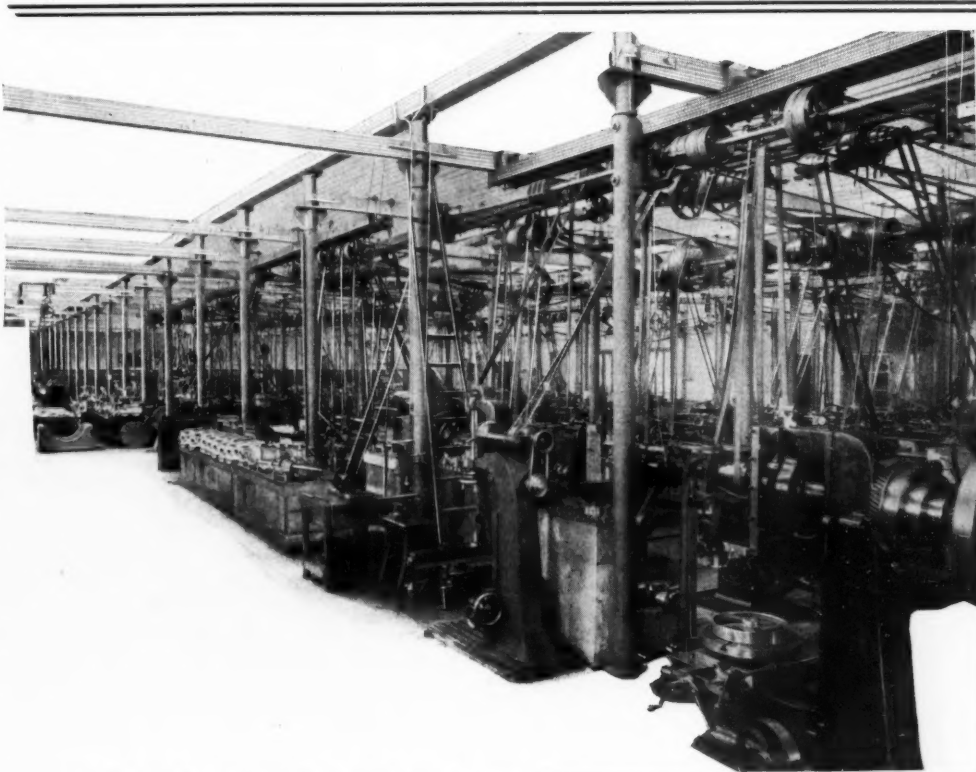
The lubricator is mounted on the dash, and is driven by a round belt fitted on the rear end of the cam shaft. A large pulley, over which this belt runs, is fixed upon a shaft passing into the lubricator fitting. The shaft carries a worm wheel on a cross shaft, upon which are mounted four small paddle wheels and a central sprocket; from this a peculiarly constructed chain is led to a similar wheel mounted in a lower compartment of the lubricator. The lower compartment forms the oil reservoir, and the chain, which has buckets provided for this purpose, raises the oil from the lower to the upper compartments, maintaining therein a constant level. The paddle wheels pick up a certain quantity of oil each time they revolve, and drop it into the pipes which lead to the crank chambers. These buckets revolve in proportion to the speed of the engine, insuring consistent lubrication.

The Fiat carbureter automatically regulates the quality of mixture at all speeds without relation to quantity. The carbureter throttle is connected through the hollow exhaust cam shaft with the governor on the forward end of the shaft. The speed of the engine can be regulated by a small lever placed above the steering wheel or by a small foot pedal placed between the clutch and the brake pedal. This is especially advantageous when driving in traffic, as it does away with handles on the steering wheel and leaves the hands free to steer. The float feed is of the usual type. Its gasoline supply is forced up from the tank by the exhaust pressure.

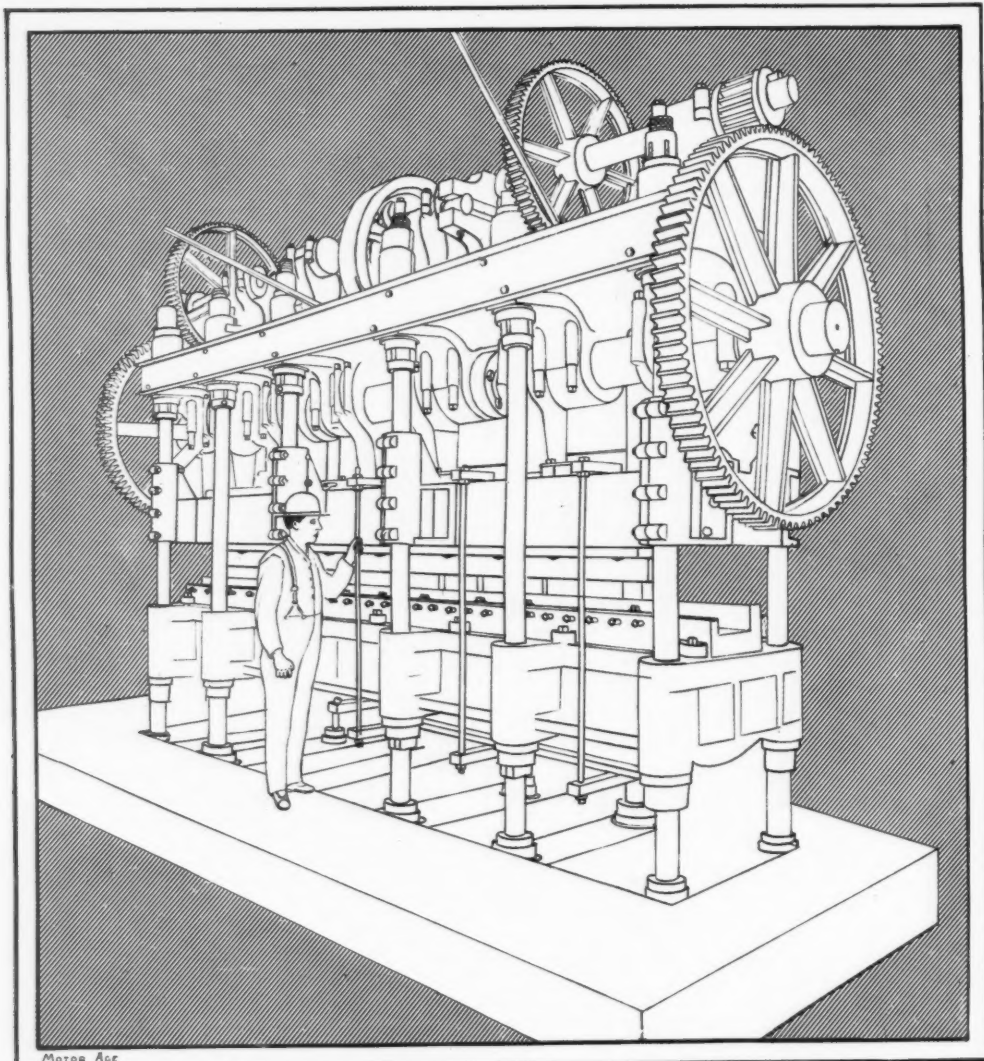
The weight of the 24-30-horsepower chassis is about 1900 pounds. It may be equipped with any style of body.

DESIGNED NEW FENDER

Ferdinand Reichle, an old and well-known carriage forger of Detroit, Mich., has applied for a patent on a new automobile fender, which he claims is superior to any now on the mar-



ONE OF THE DEPARTMENTS IN THE FIAT FACTORY



THE PRESS USED IN MAKING FEDERAL PRESSED STEEL FRAMES

ket. He has been perfecting his invention for several months and thinks that he has a fender entirely free from the body motion of the motor car. It is constructed on No. 18 steel rolled, double concave iron and weighs about 12 pounds. It can be adjusted to any size wheel and is easily removed for cleaning purposes. It is fastened to the steering gear by sockets in front and to the axles in the rear by the same means. One of the features of the fender whereby nails and tacks picked up on a tire are automatically abstracted before another revolution of the wheel is made is being commented upon very favorably by those who have seen the new device. This is accomplished by a number of fine teeth at the lower end of the fender and inside.

BRAKES DISCUSSED

S. F. Edge, in a recent interview, stated that most of the automobile accidents were caused through negligence in keeping the brakes in order. Apropos of this statement a Paris daily paper interviewed a number of French manufacturers.

An official of the Gobron-Brillie company said: "My opinion is that the brakes of the present day are good enough under all circumstances, when kept in order. Some motorists take the greatest care in cleaning their carbureter, their motor, their friction clutch, but forget all about their brakes, which they seem to think are everlasting and require no attention or adjustment."

Louis Renault thinks that there is nothing more sure about a modern motor car than the brakes, that accidents are generally caused

through neglect and that while the brakes are more powerful and effective than ever they require to be taken care of just like the motor. C. L. Charley, the Paris Mercedes representative, remarked that it was practically impossible to lose control of a car if the brakes are in good working order.

Both Messrs. Bouton and Clement said that the brake question was one of those which received particular attention in their respective factories and that more effort is spent in improving them than in developing any other single part of the vehicles.

PRESSING STEEL FRAMES

The magnitude of the machinery required in the manufacture of pressed steel automobile frames is illustrated by the press used by the

Federal Mfg. Co., in the production of its frames of this character. The picture herewith is redrawn from a photograph and the size of the press may be relatively judged by the man who operates it.

The press is 18 feet long, 15 feet high and weighs 50,000 pounds. It takes work up to 17 feet in length and 24 inches in width, and this is given a "squeeze" of 1,200 tons. The press is provided with a brake operated with a lever, so that the stroke either up or down may be stopped instantaneously. A vertical adjustment of 18 inches is provided.

NEW USE FOR MOTOR BOATS

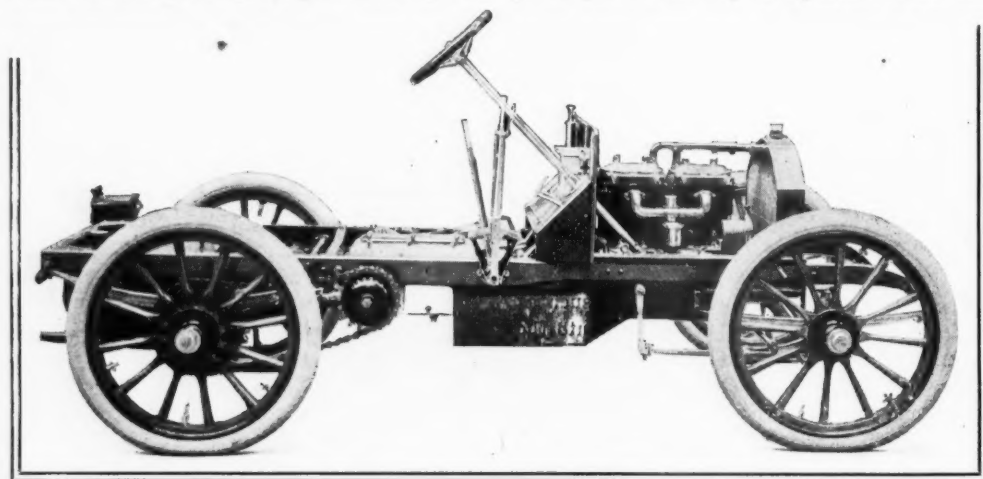
H. H. Rogers, Jr., of New York, has just placed an order with the Electric Launch Company, of Bayonne N. J., for a 31-foot automobile boat of novel design. The boat will be equipped with hoisting shackles at bow and stern, especially installed so that the complete boat can be lifted on the davits of the steam yacht Kanawha. The total weight of the complete boat, with engine, does not exceed 1,100 pounds. The plan of carrying one of these fast boats on the steam yacht's davits will undoubtedly prove popular among yachtmen when at anchor; diversion can be obtained by the owner and his guests in speeding about the harbor and inlets.

The launch will be built of Honduras mahogany, with double planking of veneer thickness, fastened throughout with copper rivets. Accommodation is provided for four passengers. The boat will be equipped with a 30 to 35-horsepower high speed automobile engine, which Mr. Rogers has selected himself. A speed of 20 miles an hour Mr. Rogers expects to obtain from this boat, and he will enter it in and about New York and on the sound during the summer, and use it from on board the steam yacht Kanawha during long cruises.

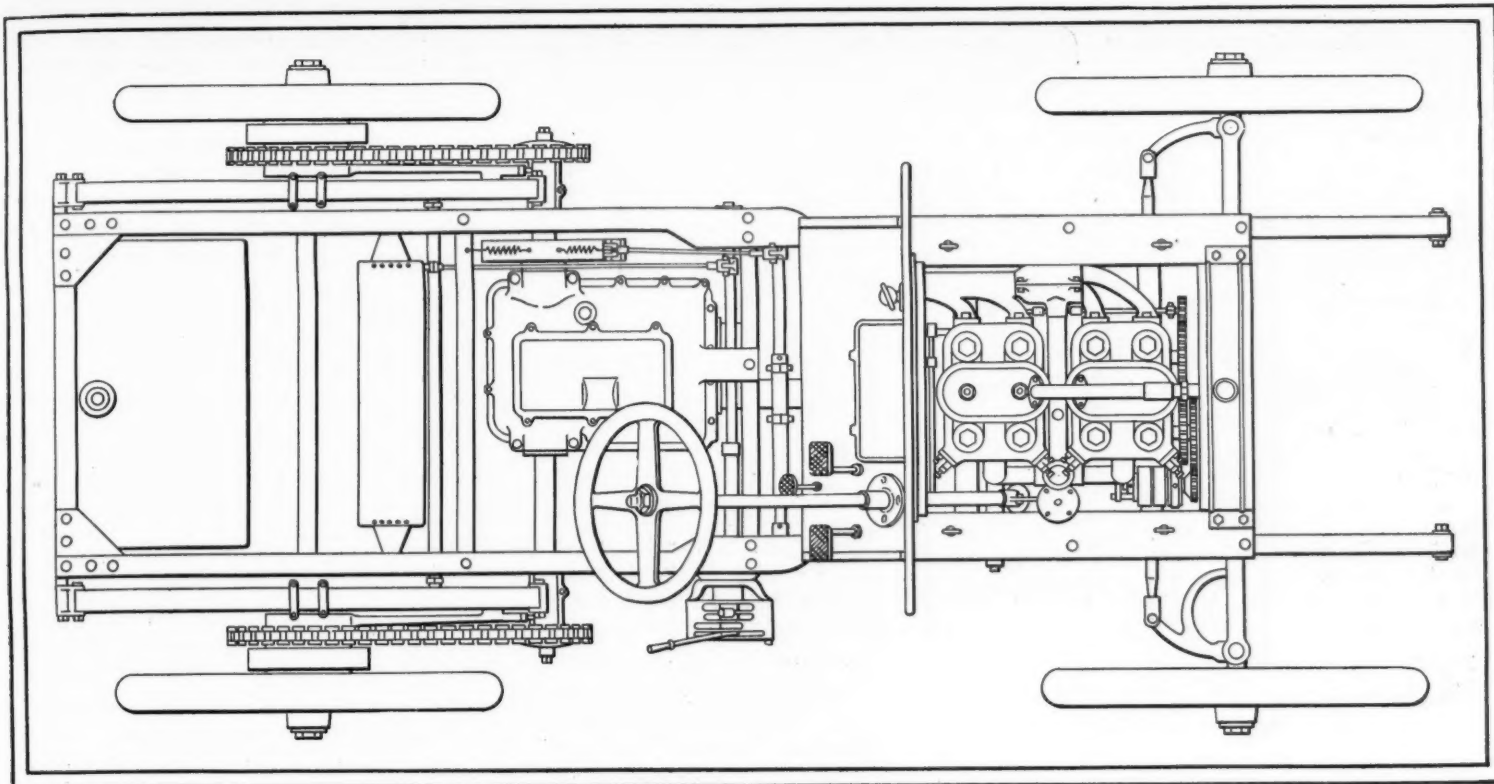
AUTOMATIC TIRE PUMP

Back in the days when the patent office was flooded with bicycle inventions hardly a week passed without the issuance of one or more patents for devices intended to automatically inflate the pneumatic tires of bicycles. These fell one and all by the wayside. The bicycle as a machine was not of a type that could be encumbered with numerous attachments. Devices fragile enough to be attached to and derive their power from the bicycle were not practicable.

The automobile presents a different condition. Being a machine standing erect on its own wheel base and being equipped with a power plant that may be operative while the



SIDE ELEVATION OF CHASSIS OF THE FIAT CAR



PLAN OF THE CHASSIS OF THE FIAT CAR

machine is standing still there is every chance for the attachment to it of devices to save manual labor in the care of the car. The automatic tire pump becomes, hence, a practical device in theory. Its practicability in fact is up to its manufacturer.

There is now being introduced in Europe a device of this kind which seems to be entirely practical. It is produced in continental Europe by Zureat-Mery & Co., and in England under license for Charles Jarrott & Letts, Ltd., of London.

The pump, which derives its power from the motor directly, has been extensively tried and pronounced very satisfactory in its operation. The time taken in the trials for the inflation of the tire was from 2 minutes 45 seconds to 3 minutes 30 seconds, to obtain the necessary pressure.

The attachment is simple. A connection nut is screwed into the cylinder. If ordinary sparking plugs are used, it can be screwed into the same orifice as that in which one of the sparking plugs is attached and the sparking plug can then be screwed in at an elbow-joint of the fitting.

The force of the explosion in the cylinder is conveyed through a small curled steel tube to a small metal pump box, which can be affixed on the dashboard or on the side of the car, and which is fitted with a pressure gauge and rubber tire connection. The whole attachment can be made in a few minutes and when once affixed, the device need not be taken off, as all that is necessary to pump up a tire is to unscrew a small fly nut in the side of the dashboard, screw in the rubber connection, connect with the tire, and then start the engine. The tire will be pumped up hard in about 3 minutes.

EDISON SAW THE TRICK

Something which is considered of more than passing interest to the automobile industry is the information that Thomas A. Edison, the famous inventor, with the support of President Roosevelt, has gained a valuable point in his

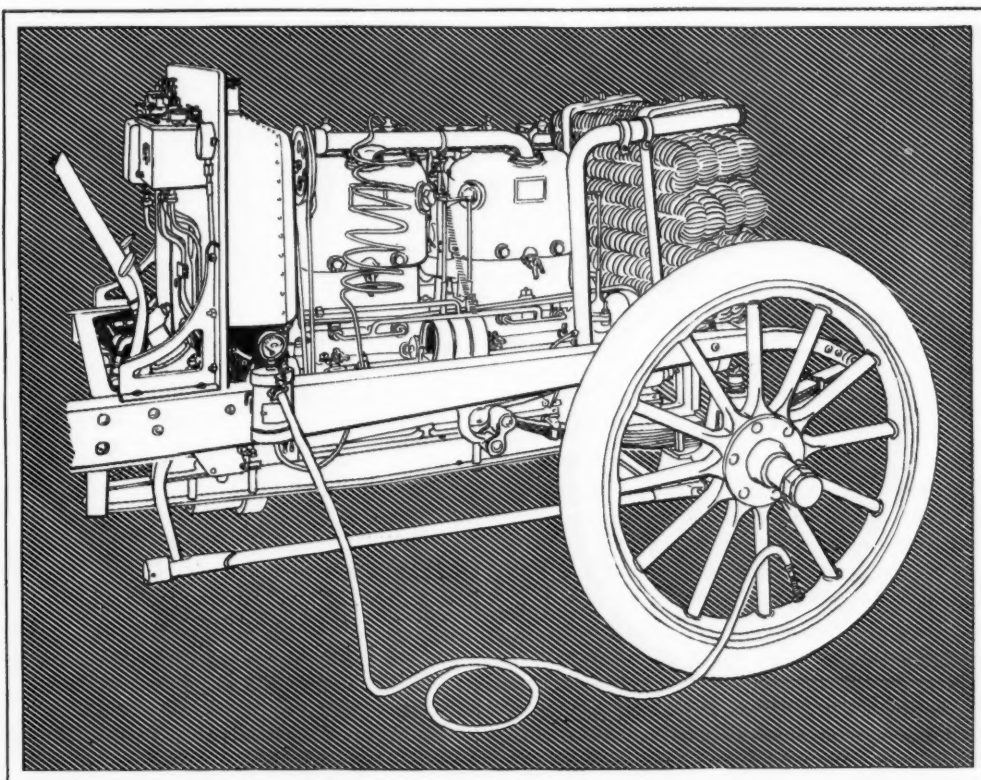
effort to expose a piece of trickery in the patent office, such as is alleged to have become common practice in this great government department. In this case the commissioner of patents is indirectly involved, and the good faith, if not the honesty of one of the examiners.

The facts in the case are substantially as follows: Mr. Edison made application for a patent for a device to be used in connection with his storage battery, which he has said would revolutionize the automobile industry and greatly benefit consumers of electricity. It is charged that while the application was pending the examiner in the case permitted an inventor who was operating along the same line to withdraw his application, amend it so as to

incorporate the valuable points of the Edison invention, and return it again for file. As the original of the amended application was filed before the Edison application it would, under the law, take precedence.

When Mr. Edison's attorneys discovered the trick they filed a protest, and asked for a hearing, which was refused. An appeal was then made to President Roosevelt, who is reported as saying: "Mr. Edison makes no unreasonable demand. He occupies a peculiar position in this inventive age and he shall be given an opportunity to be heard."

It is understood the case was heard by Assistant Commissioner Moore, in the absence of Commissioner Allen, who has gone to Europe. The result has not yet been announced.



THE AUTOMATIC TIRE PUMP IN USE

FROM THE FOUR WINDS



MISS BEATRIZ MICHELENA, OF THE "GIRL FROM DIXIE" COMPANY

Growing Slowly—There are sixty-one registered automobiles in Harrisburg, Pa., of which fourteen represent the addition to last year's total.

French Voltage Increases—According to a Paris journal electric vehicles are again becoming popular in the French metropolis, especially among the society people.

Getting Ready for Jail—Agricultural and horticultural societies of Madison county, Ind., have decided to use shot guns against automobile drivers who frighten their horses.

An Automobile Warehouse—An exclusive automobile and carriage storage warehouse is being erected in St. Louis, Mo. It will cost \$35,000, be fireproof and have five stories. John P. Herrmann, of the Herrmann Realty Co., is the proprietor.

Combination Affair—A committee has been appointed by the Fame Fire Co., Wilmington, Del., to secure an automobile which will combine a chemical engine and a hose carriage. The machine will be purchased from the La France Fire Engine Co., and cost \$5,000.

Good Judge—Fifteen owners of automobiles in Detroit, Mich., were fined \$1 and costs each for having violated the law which provides that cars driven after dark must have lights. The court decided that if the violators remain good for one week the fine will be remitted.

Demory with Timken—A. R. Demory, formerly superintendent of the Snell Cycle Fittings Co., of Toledo, O., is now representing the Timken Roller Bearing Axle Co., of Canton, O., and is calling on automobile manufacturers in the interests of Timken bearings.

Mark Still Safe—Baron de Caters tried to break Rigolly's kilometer record May 1 on the beach course of Ostende, Belgium. He drove a 90-horsepower Mercedes car and covered the kilometer in 24 2-5, which, although not near the record mark, represents a speed of more than 90 miles an hour.

Frighten Women—The chief of police of St. Paul, Minn., is after the reckless drivers of the Minnesota town. There have been many complaints lately that motorists are driving too fast in the crowded streets, and it is reported that several women have fainted near crossings, owing to the fact that drivers would run their cars at high speed to within a few feet of the street crossing, thus frightening women. The speed limit is 8 miles an hour within the business district, and cars must slow to 4 miles an hour on crossings. Each car must have a bell or horn

and at least one light. Automobiles must be licensed and the number of the license must be painted on the back of the car, the numbers to be 4 1/2 inches high.

Make Many Motor Cycles—In a recent letter to a London trade paper Peugeot Brothers, of France, stated that they had sold 4,000 motor cycles and 2,000 motors last year. During the first 4 months of this year they have disposed of 2,000 motor bicycles and are prepared to sell more than 6,000 during the season.

Plant at Moline—The Moline Automobile Co. and the Root & Van Dervoort Engineering Co., of Moline, Ill., have each purchased 6 acres of land, upon which the first named concern will erect a modern automobile factory and the engineering company a foundry and a special building for the finishing of automobile and boat motors.

Coast Branch Enlarges—The branch store and repair shop of the Diamond Rubber Co., at San Francisco, Cal., has been removed from 8 Beale street to larger quarters at 608 Mission street. The company reports a prosperous business on the Pacific coast, where Diamond tires have been thoroughly introduced during the past few years.

Sporting Blood Up—Three owners of automobiles of different make are planning to settle the question of superiority some time during June in a three-cornered race, covering a distance of 50 miles, in the neighborhood of Kansas City, Kas. The three cars are a 14-horsepower White, a 24-horsepower Pope-Toledo and a 7-horsepower Stevens-Duryea.

Came Back to Numbers—The automobile ordinance of Grand Rapids, Mich., provides that the driver's initials be displayed on the rear of the car. It appears that an alderman of the town recently tried to have a motorist halt his machine, and as the driver did not do so the alderman tried to figure out the initials. They were so complicated that he decided to introduce an ordinance to allow numbers to be substituted to initials.

Timing Peelers—Chief of Police Conroy, of Minneapolis, Minn., has been "throwing a big bluff" into the motorists this spring in the hopes of bringing them down to the speed limit without resorting to arrests. His efforts have been highly successful and drivers have taken it upon themselves to see that the speed limit is not fractured to any great extent. There are a few reckless ones, though, who will wind up in the police court. Chief

Conroy has provided several of his men with stop watches, and is going to institute a corner-to-corner check system on the racing streets. When a driver sees a man in plain clothes holding a stop watch at the edge of the sidewalk, he will soon learn that the emergency stop has advantages.

Onto the Scheme—The commissioners of Radnor township, Philadelphia, Pa., passed a new ordinance a few days ago which provides that an automobile must not be driven at a greater speed than 1 mile in 6 minutes. The former ordinance called for an uniform speed of 10 miles an hour, but it appears that some motorists ran their cars at 7 to 8 miles during 30 minutes and then covered the other 2 or 3 miles in the remaining 30 minutes.

Very Benevolent—The Indianapolis Automobile Racing Association, of Indianapolis, Ind., was incorporated last Saturday for \$1,000. Frank B. Willis, James Allison and Charles B. Sommers are the incorporating members. The purpose of the company is "to promote and encourage the mechanical arts as applied to the manufacture of vehicles propelled by gasoline, electricity and steam." Race meets will be the direct means of attaining the end.

Neverout in the West—The Motor Car Supply Co., of Chicago, has taken the western selling agency of Neverout lamps, made by the Rose Mfg. Co., of Philadelphia. For about a year S. F. Bancroft has had this agency and now that it has been turned over to the Motor Car Supply Co. Mr. Bancroft has been engaged by it to sell this line especially as well as the other goods for which the company is general western distributor.

A Pullman in Reality—M. Menier, the French chocolate manufacturer, has placed an order for a 40-horsepower touring car which, it is claimed, will be the finest car of this kind in the world. The body will be large enough to hold two beds, four arm chairs, a dining table, toilet outfit and a heating apparatus. There will be three entrances, two on the sides and one in the rear. The car will be lighted by electricity and will cost about \$20,000.

Motor Mail for Fair—Postmaster Wyman of St. Louis, Mo., has announced that in order to facilitate the postal arrangements at the world's fair an automobile service will be put into operation. There are thirteen substations on the exposition grounds. The automobiles will make five daily trips, collecting and delivering mail at each one. In this way Mr. Wyman hopes to insure mail accommodations far superior to those had at the Columbia or Buffalo expositions.

Fine or County Jail—Thirty-two owners of automobiles have thus far registered their cars with the proper authorities of Oshkosh, Wis., but the chief of police is satisfied that there are a number of others who have not yet complied with this most important regulation. It is also reported that the chief is not satisfied with his brother chauffeurs, claiming that they sometimes ride too fast. The speed limit is 8 miles an hour in the streets of Oshkosh and at crossings and bridges only 4 miles is permitted. All cars must be provided with a lamp, bell or horn and must stop when they approach a team which seems to be frightened. Offenders may be subjected to a fine from \$5 to \$25 and a trip to the county jail not to exceed 60 days.

NEW YORK HERALD

SUNDAY, APRIL 17, 1904.—NINETY-SIX PAGES.—[COPYRIGHT, 1904, BY THE NEW YORK HERALD COMPANY.]

MAYOR M'CLELLAN DURING HIS FIRST SPIN IN HIS AUTOMOBILE.



THE MAYOR DRIVING HIS DECAUVILLE CAR

PHOTO BY LAZARNICK

MAYOR DRIVES HIS OWN AUTOMOBILE

Takes His First Lesson as a Chauffeur in His Brand New \$3,500 Car.

THINKS IT "GREAT SPORT"

Held Up by Police Before He Took the Levers Himself—Spin on Riverside Drive.

Automobilists have gained an influential ally and automobiling a desirable recruit in the person of the Mayor of New York city. Mr. George B. McClellan purchased his first motor car last week, and yesterday he received his first instructions in its operation. But even in his novitiate the Mayor has had a foretaste of automobile speed restrictions, for twice when he has been out with a chauffeur his machine has been halted by police for alleged excess of speed. "I was not fined or put in jail or even haled to court on either occasion," said



MAYOR M'CLELLAN

the Mayor laughingly yesterday during the course of his instructions in Central Park. On the first occasion the Mayor was trying his car on Long Island in company with Commissioner Woodbury, of the Street Cleaning Department, when he was held up by Long Island police, but was finally permitted to proceed.

Again, while driving in Central Park, a few days ago, with Mrs. McClellan, the Mayor's machine was ordered stopped and his driver threatened with arrest for exceeding the Park limit of seven miles an hour.

"I am the Mayor of New York, and I assure you that my driver was proceeding at a legal rate of speed," said Mr. McClellan to the astonished policeman, who excused himself and moved away. "I am not an automobile expert yet," said the Mayor yesterday, as he toyed caressingly with the steering wheel. "I have yet to learn the difference between a spark plug and a carburettor, but I hope to master the details soon."

Mr. McClellan has chosen for the vehicle, with which to make his debut in automobiling an imported car built by the Société Decauville at Corbiel, France, and imported by the Standard Automobile Company. The car is of the voiturette, or light tonneau, type, has a two cylinder vertical engine of ten horse power, embracing well known Decauville features and giving a maximum speed of about thirty-five miles an hour. There are three speeds forward and one reverse, the high speed having direct transmission. The car is finished in bright red throughout. Its cost, including a demountable limousine for winter use, was \$3,500.

Mr. McClellan's instructor, who gave him his initial lesson yesterday, is Guy Vaughn, the eighteen-year-old nephew of E. T. Birdsall, manager of the Standard Automobile Company. Though he travelled up and down the west drive of the Park it was interesting to note that not a single policeman he passed seemed to recognize the city's chief executive.

After a brief lesson in the Park the Mayor took the wheel and levers into his own hands and successfully drove his car across Ninety-sixth street to Riverside drive and thence up the drive and around Grant's Tomb, repeating the trip when he had traversed the entire distance of the parkway.

"This is great sport," he said to Guy Vaughn as he came down the drive for the second time at about fifteen miles an hour. Every time he moved a lever or a brake he accompanied the operation with a verbal explanation of the act to make sure he understood the terms.

At Seventy-second street he relinquished the driver's seat to his instructor, and his first lesson was at an end. The Mayor has not yet obtained his State registration number, and his machine at present carries the sign "200 N. Y.," loaned by the Standard Automobile Company.

TWO NEW AUTOMOBILE TIRES

*The
Instantaneously
Detachable*
DUNLOP

AND

The
**HARTFORD
CLINCHER**

Introducing an entirely new departure in rim construction. ∴ Its detachable side flanges or beads are removed by the simple loosening of a screw, leaving a flat faced rim, from which the tire can be removed "like slipping a belt off a pulley"—a loose belt at that,

made under the G & J patents. This tire combines all the excellent qualities of that construction with many improved features of its own, hitherto characteristic only of **the foreign** makes

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THE LIGHTEST
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MOST DURABLE
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and remember that we use the best material obtainable and manufacture this car from the ground up, in our own plant.

ENGINE—Single vertical cylinder, developing 6 to 9 horsepower, cooled by 10 inch fan. Bearings phosphor bronze, splash lubrication.

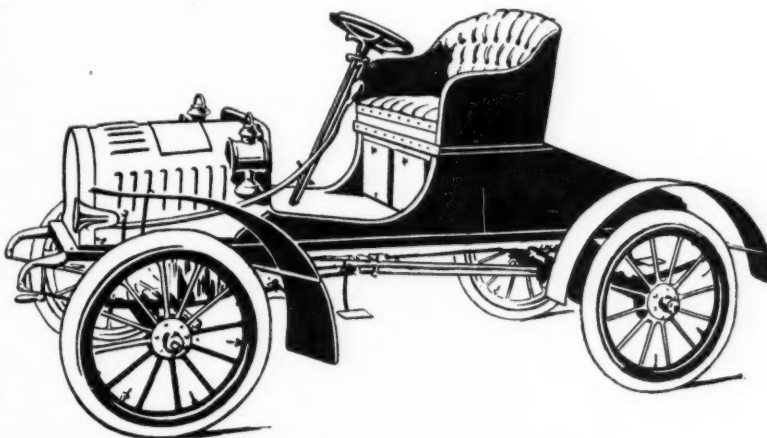
CARBURETOR—Float feed, air and gasoline controlled by one lever.

IGNITION—Jump spark from non-vibrator coil.

CLUTCH—Friction operated by foot lever.

TRANSMISSION—Sliding gear, two speeds. Gearing cut and hardened machinery steel. Enclosed in dust proof case and packed in solid oil.

DRIVE—Shaft through universal joint to bevel gears. Gears and shaft enclosed in dust proof case and packed in solid oil. Roller bearing rear axle.



BRAKES—Very powerful double acting, internal expanding, adjustable to wear.

BODY—Air seasoned lumber. Oak sills and whitewood panels.

FINISH—Any color desired, with upholstering (leather) to match (tufted or plain).

SPRINGS—Oil tempered, semi-elliptic front, full elliptic rear.

WHEELS—Artillery, of second growth hickory.

TIRES—Any clincher desired fitting G & J Rims.

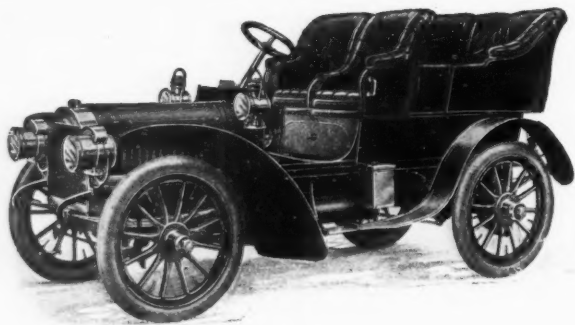
TREAD—46 inch or standard. Wheel base, 76 inch.

GUARANTEE—We guarantee the Cameron Car absolutely for one year.

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Member Association Licensed Automobile Mfrs.

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Model 22 Road Wagon Price \$900



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A limited number of the first 1904 Mercedes and Panhards ready for delivery in New York

DURING MAY

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Model "O," 16-18 h. p. Model "K," 32-35 h. p. Aluminum Bodies—Canopy Tops—Side Door Limousine Bodies. \$2,300 to \$4,000

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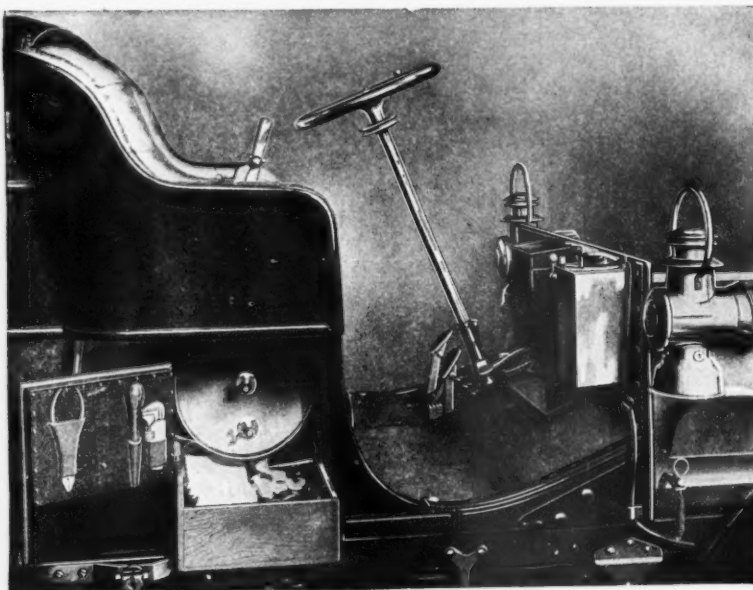
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LIGHT GASOLENE TONNEAU

Price \$1750

Note the side-door entrance to the tool-box and gasoline tank-room—also the try-cocks on the tank; observe, too, that the spark is timed by a lever placed ON the steering wheel and that the throttle is controlled by a foot lever which may be set in different positions by use of the foot alone; also that there are two speed changing levers without notches or indices, each being pushed or pulled as far as it will go, forward or backward—one giving the middle and high gears and the other the low gear and the reverse. These levers interlock so that neither can be used unless the other is in the "off" position.



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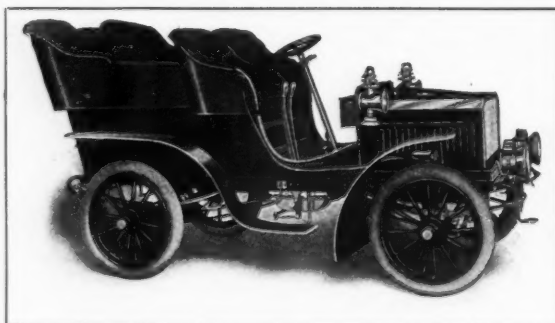
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HORSEPOWER**

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D U M O N T

THE MOST POWERFUL FOUR-
CYLINDER AIR-COOLED CAR
EVER BUILT. :: :: :: ::



AND WE GUARANTEE IT TO
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WRITE US AND WE WILL TELL YOU MORE ABOUT IT.

BUILT BY THE

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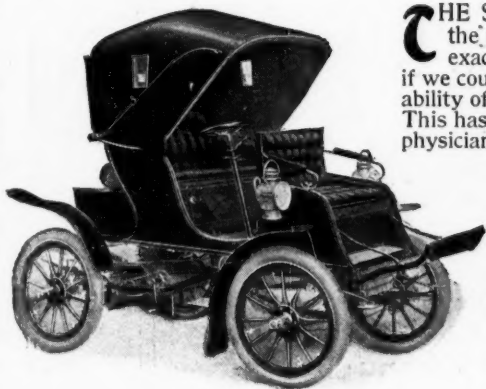
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AGENTS WANTED.

**FOUR
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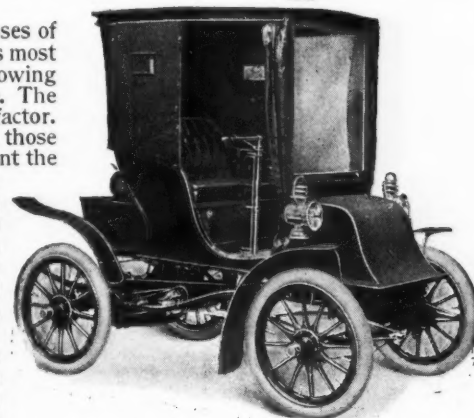
Pierce Stanhope



Folding Front Seat and Full Victoria Top

THE Stanhope Models are peculiarly adapted to the uses of the medical profession. Selecting that profession as most exacting, we have carefully studied its need, knowing if we could please the physicians we could please anyone. The ability of an automobile to run at all times is the first factor. This has been demonstrated without a single doubt, and those physicians who at first have kept horses to supplement the automobile have since sold them as needless.

The second factor is expense. This we are able to demonstrate is not to exceed the keep of one horse, with a further economy of a driver when kept in garage. The work of our Stanhope is the equivalent of three horses, and many physicians tell us that the automobile has created for them two hours daily which they never had before. In conclusion we are permitted to quote the following extract from a letter written us by a prominent Southern physician who has used our Stanhope Model during the past eight months: "As regards my Stanhope, it is, in my opinion, as near the



Coupe Top, Glass Front, Fully Enclosed

ideal as any carriage will get to be in the next ten years. For beauty of line, it is without equal. For power, it is ample. For simplicity, ideal. On the subject of motor, permit me to congratulate you on the New Pierce. You have gone one better than your model, and as that was the best, you have done well, indeed."

THIS MODEL WAS THE ONLY SMALL AUTOMOBILE AWARDED A GOLD MEDAL, ENDURANCE TEST, OCTOBER, 1903.

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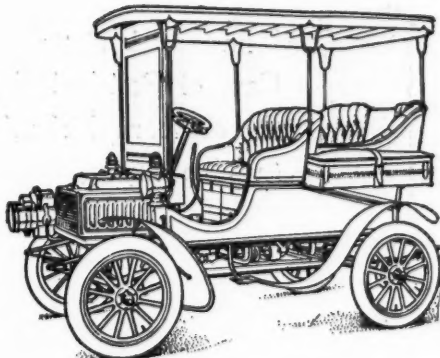
Single cylinder, lever steering

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Single cylinder, with tonneau,
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Double opposed cylinders, 16 horse
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Double opposed cylinders, with ton-
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Model "L" \$1350

Double cylinder tonneau, complete
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To the Trade and Public

We have acquired the Hartford, Conn., business of A. CLEMENT. The entire stock of Motors, Motor Bicycles, Automobiles and Parts has been turned over to us. We shall continue to manufacture the Clement Motor Outfits. We respectfully request that all inquiries regarding same be made to us in the future.

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The Good Battery in the Good Clothes.
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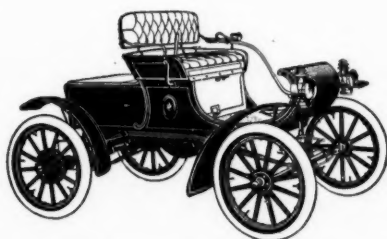
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Price \$650.00

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For particulars regarding our 1904 cars ask our nearest agent, or write direct
OLDS MOTOR WORKS, 1300 Jefferson Ave., Detroit, Mich., U. S. A.

MEMBER OF THE ASSOCIATION OF LICENSED AUTOMOBILE MANUFACTURERS.



The following clipping from pages 306 and 307 of "The Automobile Magazine," April number, is self-explanatory:

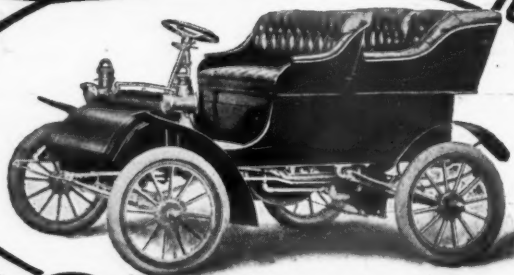
"Making all due allowance for the favoritism all men show when weighing up their own good points, still I believe I am really a bit better American than the most men. By this I mean my belief in America, in her ability, possibilities, etc., is greater than most people are inclined to have. Whenever the question arises as to whether America can do this, that or the other it never once comes to me to question her ability to do it, and to do it better and quicker than anyone else can. Despite all of this belief, I must say that when it comes to tires, I am beginning to waver a bit on this pro-American idea of mine. When I stood, or to be more truthful, sat on the beach at Ormond and saw record after record go to Continental tires, I was given the demonstration of the value of at least one thing "made in Germany" which permitted of no possible doubt as to superiority of the Continental caoutchouc's product over any other. I tried to argue that if the vehicles which won had been equipped with American tires they might have done quite as well or maybe even better than they did with the German ones, but even I with all my love for and belief in American ability, couldn't delude myself to that extent. I knew that if America made even as good a tire as these Germans made, that everybody would not be breaking records on German tires, someone and somewhere, to say nothing of somehow American tires would be seen, but when they were not, it was simply an irrefutable argument that for present, at least, we are not in the same class with the foreign tire makers. Don't ask me why, nor when, if ever, we are going to be, because I don't know. Furthermore, I don't think anyone else knows either."

For prices and other information on Metric and American sizes address,

The Continental Caoutchouc Co.,
298 Broadway, New York City.

Factory in Hanover, Germany.

Let us tell more
about the
Elmore
WITH
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\$850.00

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(WITH SELF-CONTAINED GENERATOR)

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Orient, 1904 buckboard, will make a very low price to a quick buyer, it has never been used and I will guarantee it to be in good running condition for one year.

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"Searchmont" and "Cadillac" light touring cars for sale. Price very low.

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I sell any make of Launch, Automobile or Motor on Installments at
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After you have tried other
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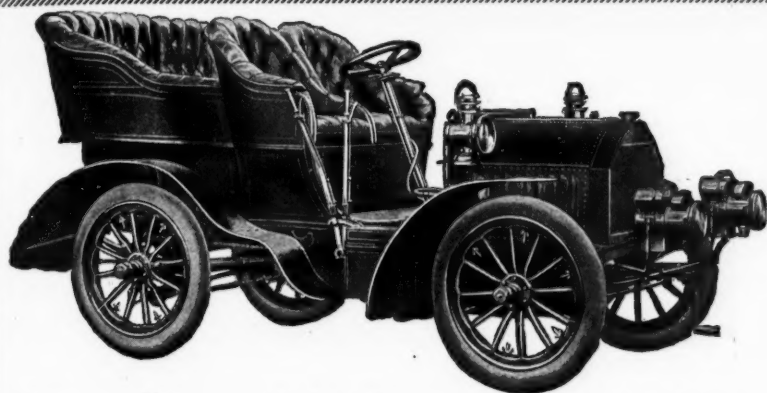
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Locomobile Gasoline Car Breaks New York-Boston Record BY ONE HOUR.

Running time, 8 hrs. 37 mins.

Front Vertical Motors only. Good Material. Good Workmanship. Careful Finish. Special Equipment. Arrange for demonstration of **running qualities** at any branch office. We can make prompt delivery on account of unequalled manufacturing facilities, and **Prices \$2100 Upwards.** because our car is **not an experiment.**

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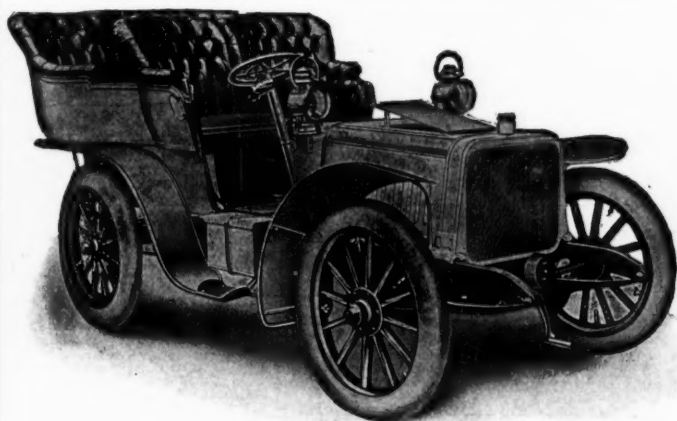
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in 15-20, or 30-35 horsepower.

American Darracq Automobile Co.

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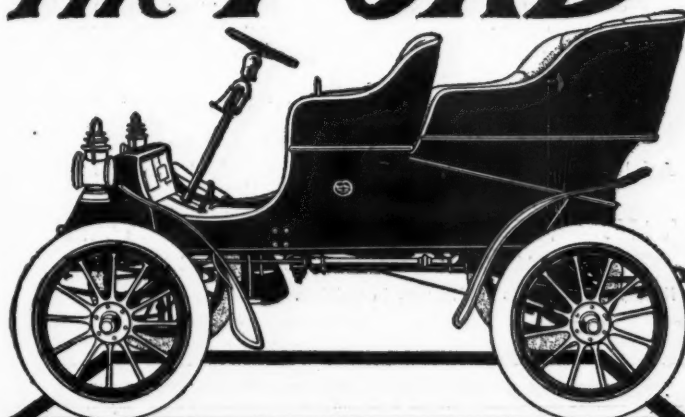
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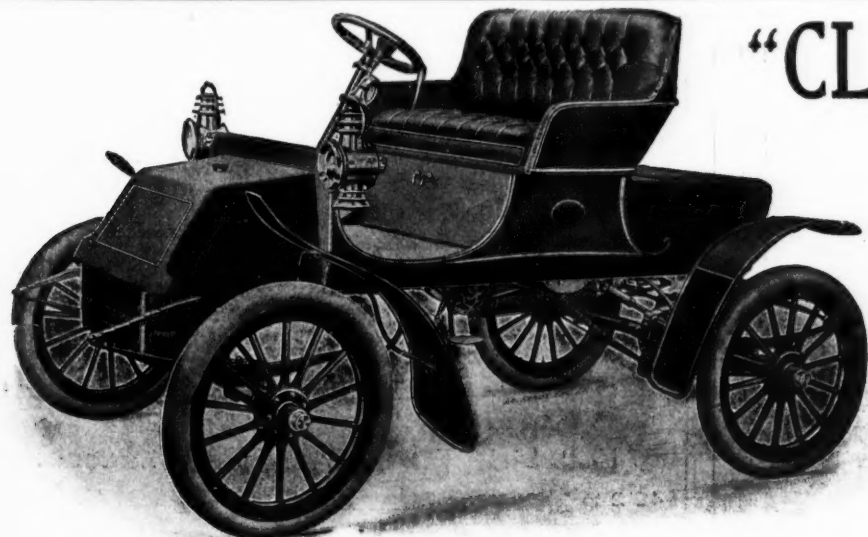
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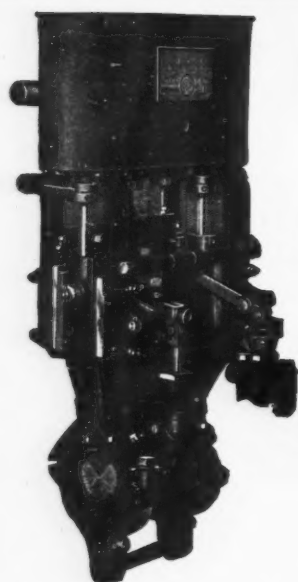
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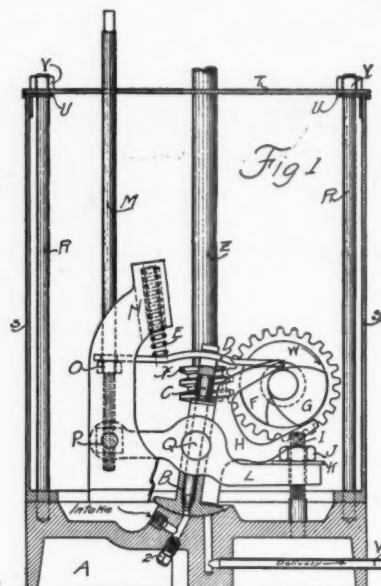
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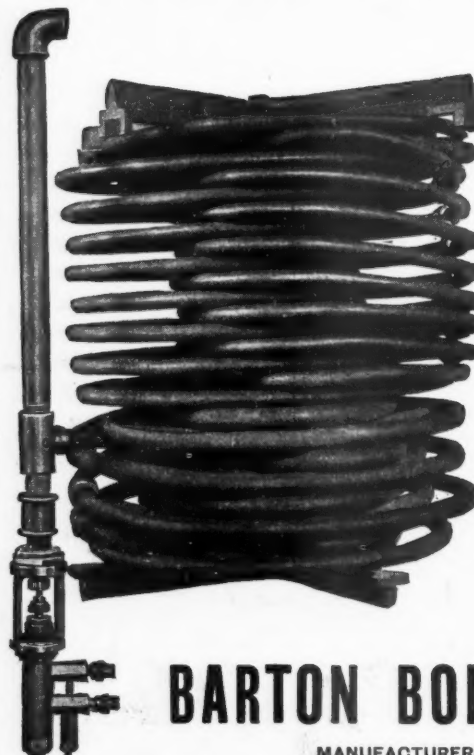
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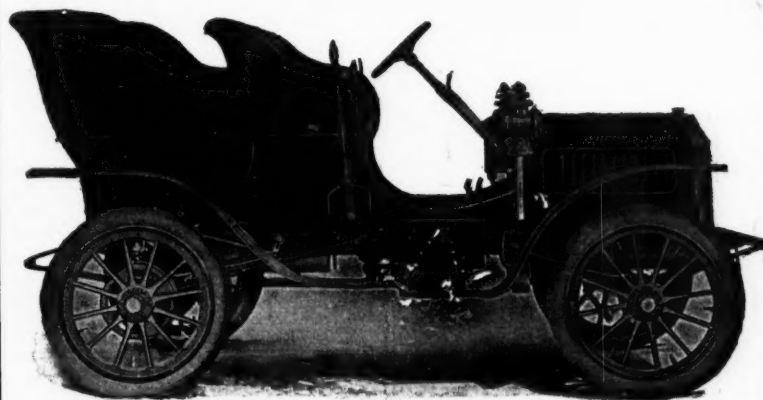
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Yours with gratitude,

D. J. MACDONALD,

Dentist, Rooms 3, 4 and 5 Durston Blk.

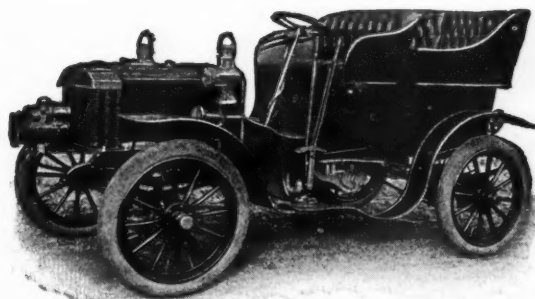
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Price is
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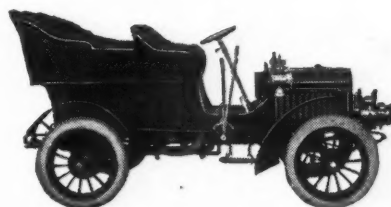
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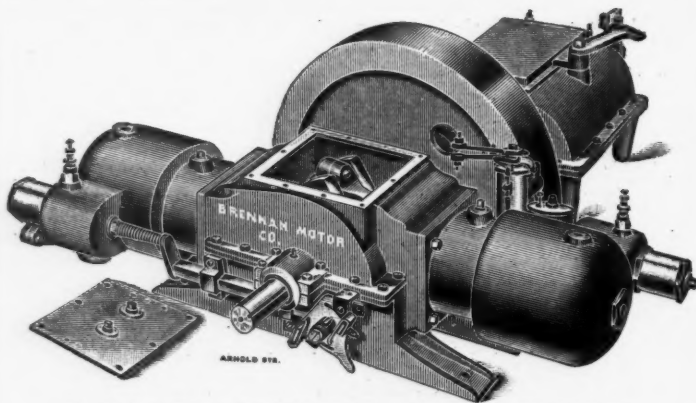
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Air Chambers
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SIMPLICITY IS THE
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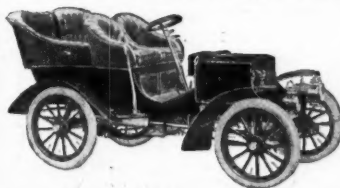
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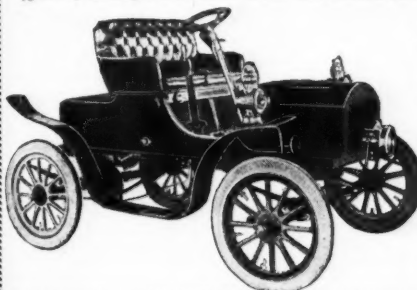
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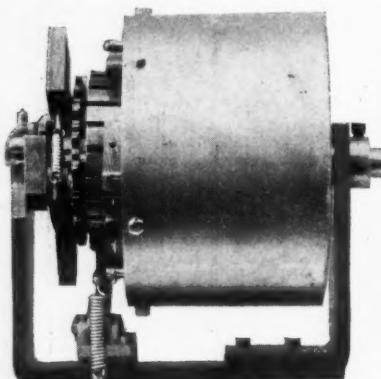
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It's a two-cycle; it's a success. One water inlet, one outlet, one fuel inlet, one exhaust.

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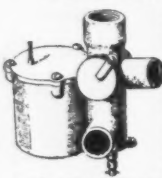
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Other Patents Pending.



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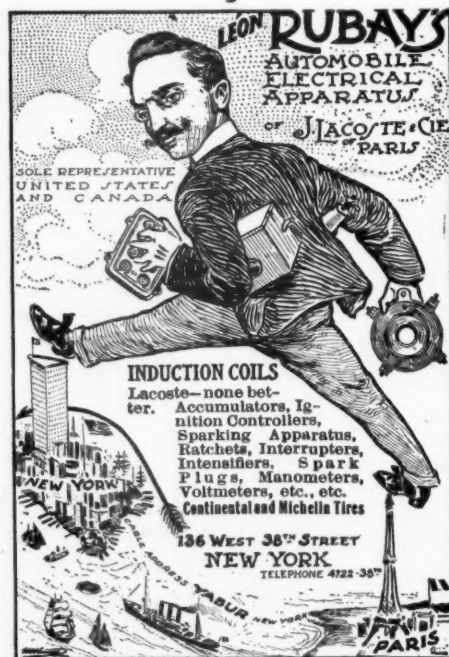
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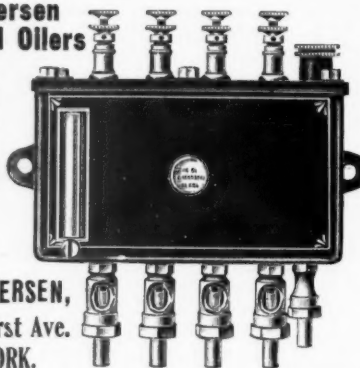
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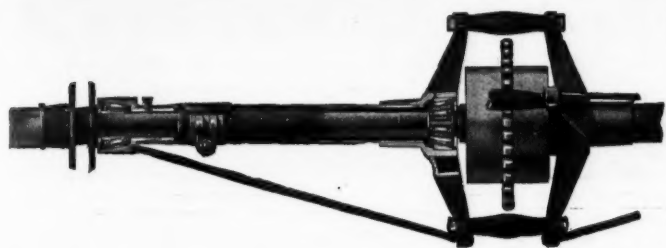


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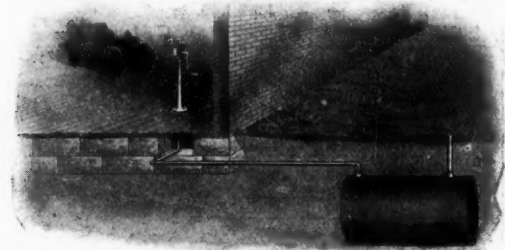
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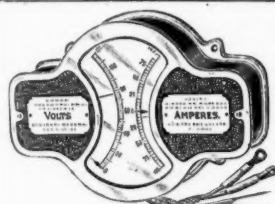


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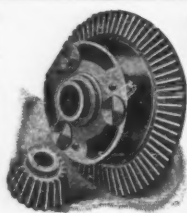
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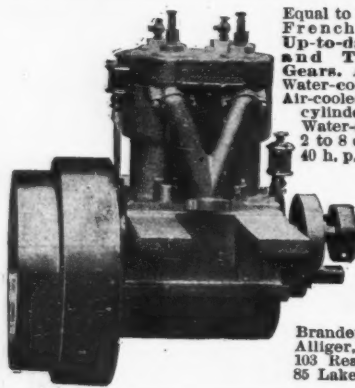
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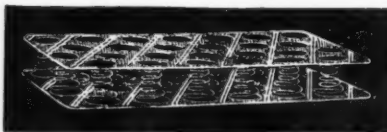
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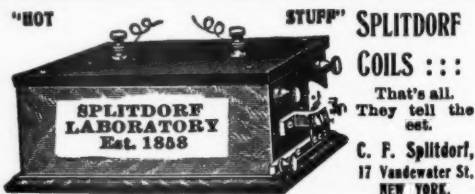
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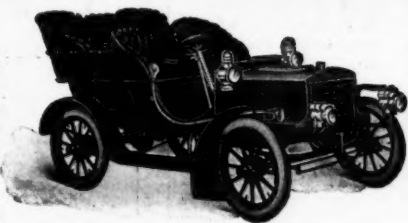
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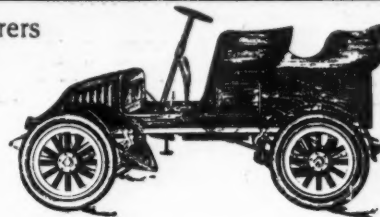
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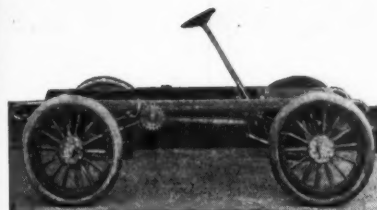
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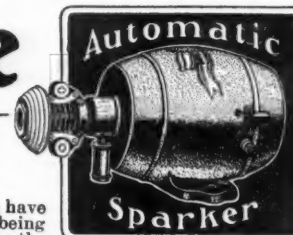
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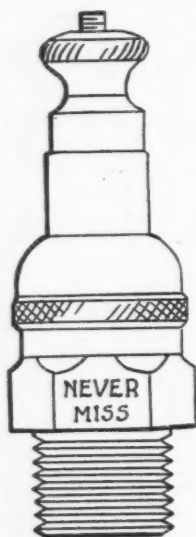


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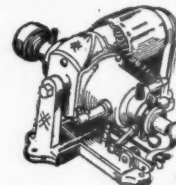
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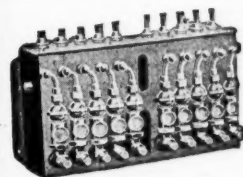
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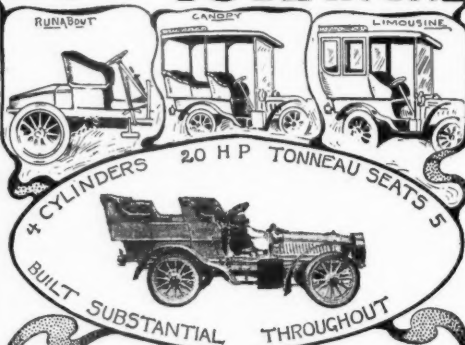
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